



missing  
1955

No. 2114.46



**Boston Public Library**

book is to be returned to the  
on or before the date last s<sup>t</sup>

has been loaned to the  
below.








ANONYMOUS LETTERS

BY THE SAME AUTHOR

THE PSYCHOLOGY OF HANDWRITING  
EXPERIMENTS WITH HANDWRITING  
WHAT YOUR HANDWRITING SHOWS

EDITED BY ROBERT SAUDEK

CHARACTER AND PERSONALITY. AN INTERNATIONAL QUARTERLY  
FOR PSYCHO-DIAGNOSTICS AND ALLIED STUDIES





1<sup>re</sup> une note sur le fait hydraulique  
du 220 et le nouveau fait qui a été  
découvert par le service des ponts  
2<sup>re</sup> une note sur les travaux de construction  
(quelques modifications sont apportées par  
le nouveau plan)  
3<sup>re</sup> une note sur une modification de  
formation de l'intérieur  
4<sup>re</sup> une note relative à Madagascar.  
5<sup>re</sup> le projet de manuel de tir de  
l'intérieur de campagne (16 mars 1894.)  
Ce dernier document est extrêmement  
difficile à se procurer et je n'en ai

THE "BORDEREAU" IN THE DREYFUS TRIAL AS FIRST PUBLISHED  
BY LE MATIN

The impurities are due to the fact that both sides of a transparent paper  
have been covered with writing

# ANONYMOUS LETTERS

A STUDY IN CRIME AND HANDWRITING

*By*

ROBERT SAUDEK, PH.D.

WITH 8 PLATES AND  
10 ILLUSTRATIONS IN THE TEXT



METHUEN & CO. LTD.  
36 ESSEX STREET W.C.  
LONDON

100-22 1934

CONSTITUTION



# CONTENTS

	PAGE
I. WHY THE PUBLIC AND THE LEGAL AUTHORITIES DISTRUST HANDWRITING EXPERTS .	I
II. THE TRIAL OF CAPTAIN ALFRED DREYFUS .	15
III. SIMILARITIES AND DISSIMILARITIES IN HANDWRITING . . . . .	56
IV. ANONYMOUS LETTERS . . . . .	77
V. AN ANONYMOUS LETTER OF BLACKMAIL .	90
VI. ANOTHER BLACKMAIL LETTER . . .	102
VII. FORGERIES OF PARTS OF DOCUMENTS ONLY	122
VIII. CONCLUSIONS . . . . .	136
INDEX . . . . .	139



# LIST OF ILLUSTRATIONS

## PLATES

Part of the "bordereau" in the Dreyfus trial  
as first published by *Le Matin* . . . *Frontispiece*

PLATE		FACING PAGE
I.	An alternate interpolation of Esterhazy's authentic writing with that of the "bordereau" . . . . .	38
II.	Photograph of a girl with both hands mutilated Drawing by the same girl . . . . .	76
III.	An anonymous letter of blackmail . . . . .	92
IV.	Continuation of the blackmail letter, Plate III . . . . .	94
V.	Another anonymous letter of blackmail . . . . .	104
VI.	A second anonymous letter written by the same person as Plate V . . . . .	106
VII.	(a) A disputed document . . . . .	124
	(b) Enlarged photograph of two cross-lines written while the ink was still wet	
	(c) Cross-lines in an allegedly forged cheque	
	(d) Enlarged cross-lines; the loop was written after the ink of the downstroke was dry	
	(e) Enlargement of a part of c	

## IN THE TEXT

FIG.		PAGE
1 a, b.	The "bordereau" after removal of the superimposed writing . . . . .	20, 21
2.	Graph-paper superimposed on an enlargement of two identical words of the "bordereau" . . . . .	26



FIG.		PAGE
3.	Facsimile of Bertillon's diagram . . . . .	28
4, 5.	Two examples of Dreyfus' handwriting . . . . .	41
6.	Handwriting of two identical sister-twins reared together . . . . .	59
7.	Handwriting of another pair of identical sister- twins reared together . . . . .	63
8.	A Dutch IOU which formed the main part of the evidence in a charge of manslaughter or murder . . . . .	63
9.	Handwriting of a man suffering from rheuma- tism: (a) written during an acute attack, (b) written after the rheumatic troubles have yielded to treatment . . . . .	74
10.	Handwriting of a girl with mutilated hands . . . . .	76

# I

## WHY THE PUBLIC AND LEGAL AUTHORITIES DISTRUST HANDWRITING EXPERTS

‘ Give me two lines of a man’s hand-  
writing and I will hang him.’

*Cardinal Richelieu.*

‘ . . . when the experts were called upon to testify as to the genuineness or otherwise of the disputed document, they disagreed as they always do. . . .’

**T**HIS is a quotation from a London evening paper, March 1933 ; but a similar sentence of the same meaning appears in practically all newspaper reports whenever in civil and criminal courts all over the world a disputed written document forms an important part of the circumstantial evidence.

This ironical attitude towards forensic examiners of handwriting is by no means typical of our own times only ; we may go back in history 100, 400 or 1,400 years, to see that the same objections against the evidence of handwriting experts which are raised to-day have been raised throughout Western civilisation.

Here is a quotation from a pamphlet written in 1704 (by an eminent French authority on

Civil Law), and republished in English in 1744.<sup>1</sup>

‘ How often have these Pretenders to Skill differed among themselves? How contradictory their Sentiments; some maintaining a Writing to be an Original, others that it was a Copy only; some that such a Writing was genuine, others, that it was forged? Need there be a stronger Proof of the Uncertainty of their Skill, and Danger of building upon their evidence, than their own Disagreements?’

And a few pages further on we read in the same pamphlet :

‘ Who can say he is safe in Life, Liberty or Character, whilst Forgerers are encouraged by the Practice introduced into our Courts of Judicature, of admitting Proof by Similitude of Hands, in Criminal Prosecution?’

No doubt this critic and all who accepted his argument in the course of another two hundred years or so were right, were it only because history does not tell us of a single Skilled Viewer (as the experts were then called) who was really skilled or had the slightest notion of those features from which the authorship of a handwriting can be reliably established. Nowhere in the expert

<sup>1</sup> *A Dissertation shewing the Invalidity of all Proof by Similitude of Hands, in Criminal Cases, London 1744.*



literature up to 1857 do we find any hint as to the difference between conspicuous and inconspicuous features in handwriting, or as to the evidence of either ; nor any discrimination between those features which are influenced by mechanical factors (e.g. writing materials, quill, nib, pencil, chalk) and those which are due to physical factors (e.g. temporary handicaps such as fatigue, or recurring rheumatic troubles, stiffness caused by injuries, or the changes in any writing in the course of life) ; and finally those features, if there are any, which are indestructibly connected with the writer's personality and nobody else's.

As a matter of fact, until the end of the nineteenth century, the same criticism as that uttered almost 1,400 years before by the Emperor Justinian still held good.

This is what the Emperor decreed when supplementing his first and second law on the validity of handwriting as evidence in Law Courts by a third and final commentary :

‘ We have considered the Laws now in Force concerning Proof by Similitude of Hands ; and have seen that some authorise the Admission of such Proof, and that our Predecessors, by other Laws, had entirely excluded it. (Let me say, by the way, that there are no Remains of these last mentioned Laws to be met with now). These wise Emperors, convinced by Experience, that

what had been intended to prevent the bad Effects of the Injustice of particular Persons, had opened a Gate to the Forgerers, who set about counterfeiting all Sorts of Hands. As soon as they saw that Proof by Similitude of Hands was admitted: These discerning Legislators saw the Absurdity of endeavouring to detect a forged Writing only by its Similitude, with one admitted of all Hands to be genuine, because Falsehood is nothing but an Imitation of that which is true.

‘And<sup>1</sup> we ourselves have observed a Multitude of Forgeries occasioned by the Admission of this Sort of Proof; but particularly an Instance in *Armenia*, no less extraordinary than unexpected. A particular Person having exhibited in a Court of Justice, a written

<sup>1</sup> Quoniam igitur in his temporibus innumeras invenimus falsitatis in judiciis multis quorum fuimus auditores; et quoddam in opinabile ex Armenia nobis exortum est: Oblato namque commutationis documento et litteris dissimilibus judicaris, quoniam postea inventi sunt ii qui de documento testati sunt suscriptionem subdentes, et eam recognoscentes, fidem suscepit documentum: et quoddam hinc inopilabile occurrit, eo quod litterae quidem sine fide visae sunt, licet examinata responsa verorum testium cum veritate concordaverunt, et hoc per fidem testium quae videtur quodammodo esse cauta. Videmus tamen naturam ejus crebro egentem rei examinatione; quando litterarum dissimilitudinem saepe quidem tempus facit. Non enim ita quis scribit juvenis et robustus, ac Senex et forte tremens; saepe autem et laguour et hoc facit. Et quidem hoc dicimus quando calami et atramenti immutatio similitudinis per omnia aufert puritatem; et nec invenimus de reliquo dicere quanta natura generans innovat et legislatoribus nobis praebet causas, etc.

Contract of Truck or Exchange which was denied by the Defendant, the Court ordered it should be proved by Similitude of Hands ; skillful Scriveners were appointed and heard : they could see no Similitude, and therefore adjudged the Contract to be forged. Yet after all, Chance brought Truth to Light ; and the Writing, which all the skillful had judged to be forged, was found to be genuine, and owned such by all those who had subscribed to it as Witnesses.

‘ But upon the Whole, what Certainty can there be in a Proof founded on any thing so uncertain and variable, as a Resemblance or Similitude of Hands subject to Alteration from so Many Causes and Incidents ? Does any Man write always in the very same Manner ? What Likeness can be between the Strokes of Pen guided by a young vigorous steady Hand, and those produced by the same Hand, when it comes to be enervated by old Age ? But what do I say ? Is there any thing more necessary than the simple Change of a Pen or Ink (or even of Paper) to occasion a Dissimilitude ? In short, it is impossible to enumerate the Inconveniencies that might ensue from the Admission of such Proof, and the Motives that induced those Legislators and us, &c.’

I cannot see much difference between the views which Emperor Justinian held in 529

and those expressed about two years ago by an English judge.

Is this so because the skill and the wisdom of the experts on handwriting have not improved in the course of 1,400 years, and because now as then they miserably break down whenever put to a severe test?

Recent experiences in many civil and criminal courts all over the world rather suggest a positive answer to these questions.

Only in the course of the last few years has public opinion been greatly excited by numerous cases where in law courts a letter of farewell was claimed as the main evidence of suicide by the defendant, and as evidence of murder by the public prosecutor, who thought the letter to be a forgery and the alleged forger to be the murderer.

Of those numerous cases one happened in New York and another in Vienna. In neither case did the handwriting experts agree.

In another case, tried at The Hague, a disputed document, *Fig. 8*, was expected to bear evidence either of murder or of manslaughter; but here again five experts testified to the genuineness of the document, while four others pertinently claimed it to be a forgery.

In Paris half a dozen handwriting experts recently employed in a *cause célèbre* fared even worse. They attributed some writing to a person who by other really conclusive evidence, or at least by such as the Court

regarded as conclusive, proved to be innocent of the alleged forgery.

In Berlin, no less than fourteen experts, among them some of high repute, could not agree on the question which part of a receipt for a very large sum had been written first, and which later on. The upper part, a somewhat lengthy text, was admittedly written by the defendant, and the signature beneath was the undisputed genuine writing of the plaintiff. But the latter claimed that his signature had been written on a blank and criminally misused by the defendant's insertion of a false text.

Dozens of similar cases could be cited. But, irritating as they are, they have at least this in their favour, that in none of them can we doubt the good faith of the experts. True, they disagree; some of them are evidently ignorant; but at least they mean what they say, whereas a hundred years ago one could safely assume that the Skilled Viewers did not mean what they said, but were deliberate liars, and sometimes forgers themselves, in fact professional crooks in the permanent service of those ill-reputed *cabinets noirs* of which history tells us such horrifying details.

It was admittedly their task either to produce forgeries, or to testify in courts to the genuineness of such forgeries, or to supply colleagues of theirs who served the same



master with that written material which was needed to condemn a man.

Richelieu said: 'Give me two lines of a man's handwriting, and I will hang him.'

'Cecil and Walshingham,<sup>1</sup> Elizabeth's ministers, used forgeries unblushingly in the Babington conspiracy.

'Maitland of Lethington, who was Mary Stuart's secretary, admitted at the York Conference that he had often imitated her writing. Camden, who had access to Cecil's secret papers, testifies to this fact, in fact he used to amuse himself by forgery. Elizabeth herself, talking to Da Silva, the Spanish ambassador, told him that she knew that Lethington had forged the casket letters, and that she was going to make him feel very uncomfortable about the matter.

'Moray is suspected of having forged the confessions of Paris, Bothwell's servant.

'Elizabeth, when a shrewd young girl, 'twixt axe and crown, took precautions against any additions to her letters by covering the space unoccupied by her writing with crossed lines and smaller crosses like those which now stand for kisses in love-letters.

'When Lord Gordon was a prisoner at Craigmiller, Moray sent a forged order as if

<sup>1</sup> Sir George Turner: *Mary Stuart. Forgotten Forgeries.* Rich & Cowan, Ltd., London, 1933.

from Mary for his execution, but the Captain of the Castle refused to act on it.

‘Elizabeth herself, when in the Tower in Mary Tudor’s reign, narrowly escaped execution in the same way.

‘When Lethington was under Moray’s displeasure, imprisoned and about to suffer death, Kirkcaldy forged an order for his release, and so he escaped.

‘The insurgent Lords after Carberry Hill probably forged a letter from Mary to Bothwell to get over the scruples of Kirkcaldy of Grange who in their name had promised her a safe conduct. This letter whether forged or not, was never shown, although its importance is obvious.

‘Mary’s consent to the bond of her marriage to Bothwell is an admitted forgery by Lethington.’

These are only a few instances in the history of England. They sound almost harmless if compared with those which we come across in the history of France, particularly in the time of Cardinal Richelieu ; but even later, as a matter of fact up to the time of the great Dreyfus *affaire*, time and again some *cabinet noir* was at work. The great adventurer Casanova, though hardly a reliable authority, tells amusing stories about the practices by which the King of France was induced to issue those *lettres de cachet* against undesirable

persons, who were accused of treasonable correspondence and had no possibility of appealing against such orders though their alleged letters were not even shown to them.

But though such experiences are quite impossible nowadays, and though our laws certainly do not encourage forgers, the fact remains that the evidence of modern experts sometimes seems to the public no more reliable than that of those crooks who pretended to expert knowledge in former times.

No wonder the public and the legal authorities are even to-day quite as sceptical about the science of handwriting experts as about that of psychiatrists, of whom it is known that they never agreed in court when two or more of them were testifying in the same case.

So irritating is this experience that one may safely say that if it were possible to dispense with experts, both on psychiatry and on handwriting, the juridical authorities would be only too glad to do so.

But neither has this ever been possible, nor is it so to-day. So numerous are the cases where some handwriting—not necessarily a signature which is the only means by which to dispose of material possessions or to enter into contractual engagements, but possibly a figure or a date only—is disputed, that one could as well stop hundreds of proceedings altogether as dispense with the evidence of experts.

What then have we to do ?

Shall we follow the ancient rule which for some centuries chose between the two evils by allowing the proof by similarity of handwriting in civil law, and not admitting it where criminal charges were concerned ?

Hardly, since their argument was theological rather than judicious. They of course took it for granted that there is such a thing as Divine Law, irrefutable, unalterable, and for ever valid to Man.

Now, since it was written that ' One witness shall not rise up against a man for any iniquity ; or for any sin, in any sin that he sinneth ; at the mouth of two witnesses, or at the mouth of three witnesses, shall the matter be established ' (Deut. xix. 15) ; and further : ' No man shall be condemned to die, but on the testimony of three or, at least, of two witnesses ' (Deut. xvii. 6 and xix. 15), the application of this Divine Law amounted practically to this, that in any case where the criminal law was involved, the genuineness or otherwise of a disputed handwriting could be established only if three witnesses happened to be present when it was actually written, which meant practically that most of such cases had simply to be dismissed without further trial.

Such a view could not possibly last for ever. And it seems to me to be rather amusing that the profession of experts on handwriting

should have survived mainly because clerical fathers were afraid lest such a principle, if consistently applied, would deprive them of the possibility publicly to prosecute adultery in court.

After all, so ran their argument, there *are* crimes which because of their very nature are hardly ever committed in the presence of witnesses, and if therefore forgers could be convicted only on the evidence of witnesses the same would hold good for adulterers as well.

Perhaps in their view an unconvicted adulterer was a greater evil in the eyes of God than a man unjustly convicted.

Anyhow, their second argument is more consistent with our present ways of arguing than their conception of the Divine Law. It runs as follows: either has the proof by similarity of hands no merit whatsoever, and then it should be completely discarded, or it has some value, and then there is no reason why once admitted in one case it should be refused in the other.

We shall see in a later chapter that this logic, plausible as it sounds, is often, and rightly so, repugnant to many of our ablest judges. I know of some who would never convict a defendant on the mere evidence of handwriting experts when the charge is a criminal one, but would hardly hesitate to do so when sitting in a Civil Court. But,



unfortunately, I also know of judges who would accept the evidence of any two unskilled 'experts' should chance will it that they should agree once in a way.

Again, such a procedure sounds wise enough, but in practice, though unintentionally, it produces class justice.

We have to consider that there are more incompetent experts than competent ones in order to understand that a wealthy defendant will always be able to secure the services of some who testify in his favour, and by disagreeing with his skilled colleagues will create those doubts which according to an old-established principle should always be given to the benefit of the defendant.

'It is much more equitable, or rather far less unjust to absolve a criminal than to condemn an innocent person.'<sup>1</sup>

Of all the problems with which we have to deal in connection with forensic *expertise* on handwriting, this seems to me to be the most important. Though naturally I cannot prove it with definite statistics, I may claim to have sufficient evidence to believe that of all cases where experts have disagreed in the last ten years or so, this reason accounts for eighty per cent of those dissents, and therefore of course also for the conclusions which the public and the juridical authorities make from this

<sup>1</sup> Satius est impunitum relinqui facinus nocentis, quam innocentem damnare. L. 5. ff. de Paenit.

apparent uncertainty as to the skill of the experts.

But how can the judge discriminate between the skilled and the unskilled expert ?

Let us attempt to find an answer to this question in the most famous case of modern times, when for the first time the old school of *expertise* in handwriting clashed with the new, when for the first time the novel mentality of our science shed its light in European law courts, and when all the dark forces combined in the struggle against enlightenment : *l'affaire Dreyfus*.

## II

### THE TRIAL OF CAPTAIN ALFRED DREYFUS

THE famous trial of Captain Alfred Dreyfus of the French General Staff was one of the most spectacular trials in history, and at the same time also the most famous test to which forensic graphology (*expertise* on handwriting in law courts) has been put so far. For a number of years the attention of all parts of the world was centred on this case, mainly for political reasons, but also because it offered a welcome occasion for the struggle against the methods of the *cabinet noir*, racial prejudice, and unfair and partial jurisdiction.

For almost twelve years the home policy of France was overshadowed by those strange and unexpected events which lent so dramatic a colour to the numerous spectacular trials, held partly in public and partly in camera, between 1894 and 1899, all connected with the Dreyfus case.

It all started with a mistake on the part of the highest French military authorities. Erroneously they suspected a member of their General Staff, Captain Dreyfus, who happened to be a Jew, of actual spying for the country's arch-enemy, the Germans.

He was charged with having given a number of pieces of valuable information to the military attaché of the German Embassy in Paris.

From the beginning there were many indications which to an impartial judge should have cleared Dreyfus of that horrible suspicion, and these indications were most emphatically brought before the French authorities.

But it was of no avail. Once having made the mistake of arresting Dreyfus, they would listen neither to the evidence of the defence nor to his own denials. And so passionate became the fight for and against Dreyfus that it grew into a sort of holy war for national symbols and idols.

All conceptions were blurred and distorted, common sense discarded, hatred and prejudice idolized. To believe in Dreyfus' innocence was at that time equal to contempt of the French Army, whereas to believe in Dreyfus' guilt was equal to real patriotism.

Even when it became evident that those documents on which the charge against Dreyfus was based were actual forgeries prepared by a member of the staff of the French Intelligence Service, there were newspapers which declared the forger to be a national hero and a real patriot.

The political, military, legal, and racial aspects of the facts and principles involved have been discussed in all newspapers of the

world, in many parliaments, and in at least a hundred books published in a dozen languages.

But we are concerned here only with the examination of one document, the *bordereau*, or memorandum, the genuineness or spuriousness of which formed the main, if not the only, issue in the greatest struggle for justice which Europe has witnessed for at least a century.

Here are the main events in the case.

Captain Dreyfus was convicted of high treason in December 1894, publicly degraded on January 5th, 1895, pardoned on September 19th, 1899, but vindicated and re-established in his military rank only on July 13th, 1906, and made *Chevalier de la Légion d'Honneur* a few weeks later.

Emile Zola was treated as an enemy of his country when he started Dreyfus' defence with his famous *J'accuse* in January 1898, and given a state funeral when his ashes were transferred to the Panthéon on June 4th, 1908.

From Dreyfus' arrest until the last and final verdict on his innocence, a number of forgeries had obscured the case, but the main circumstantial evidence throughout the first four years of the proceedings was a document written on thin transparent tracing paper, the *bordereau*, a part of which, viz. about three-quarters of the first page, is reproduced here as frontispiece, in the same form



in which it had first appeared in *Le Matin* on November 10th, 1896.

No doubt after a first glance at this document the reader will be inclined to assume that the hazy indistinctness of the picture is due to the publishers' or printers' carelessness, and will therefore be the more surprised to gather that the twelve independent experts who testified in favour of Dreyfus had to base their judgments on this very reproduction of the document, without up to the last moment being allowed to examine the original. Nothing more than this picture was allowed to be known to the world at large.

The reader will understand that the inverted 'mirror-writing' running from right to left and superimposed on the slanting hand which runs from left to right appears in the picture only because the letter was written on transparent paper and apparently photographed while light was admitted behind the sheet.

As a matter of fact, given no further explanation, the picture does hardly allow of any other interpretation. Any printer will confirm that a 'line block' printed on ordinary newspaper hardly shows whether the block has been made from a photograph or possibly from an engraving.

The military authorities for years kept silent about how precisely this printing block—the very stumbling-block of so many experts—has been made.

We shall see later on that several of the independent experts, though recognising that it was not Dreyfus' writing, were greatly puzzled by its lack of rhythm and life.

For the reader's convenience we reproduce also the plain features of the *bordereau* after removal of the superimposed writing which distorts the picture. (*Fig. 1 a, 1 b.*).

The document reads as follows :

1. Sans nouvelles m'indiquant que vous
2. désirez me voir, je vous adresse cependant
3. Monsieur quelques renseignements intéressants
4. 1° une note sur le frein hydraulique
5. du 120 et la manière dont s'est conduite
6. cette pièce.
7. 2° une note sur les troupes de couverture
8. (quelques modifications seront apportées par
9. le nouveau plan).
10. 3° une note sur une modification aux
11. formations de l'artillerie.
12. 4° une note relative à Madagascar :
13. 5° le projet de manuel de tir de
14. l'artillerie de campagne (14 mars 1894)
15. Ce dernier document est extrêmement
16. difficile à se procurer et je ne puis
17. l'avoir à ma disposition que très peu
18. de jours. Le ministère de la guerre
19. en a envoyé un nombre fixe dans
20. les corps et ces corps en sont responsables

Sans nouvelles m'indiquant que vous  
desirez me voir, je vous adresse cependant  
ci-joint quelques enseignements intéressants  
1° une note sur le plan hydrographique  
du 120 et la manière d'en être conduit  
avec précision.

2° une note sur les formes de courbures.  
(quelques modifications vont apporter par  
le nouveau plan.)

3° une note sur une modification aux  
formations de l'intérieur :

4° une note relative à Madagascar.

5° le projet de manuel de tir de  
l'infanterie de campagne. (16 mars 1896.)

FIG. 1 A

The "bordereau" after removal of the superimposed writing.

Le dernier Document est extrêmement  
difficile à se procurer et je ne puis  
l'offrir à ma disposition que très peu  
de fois. Le ministre de la guerre  
en a envoyé un nombre fixe dans  
les corps et ces corps en sont responsables,  
chaque officier détenteur doit  
remettre le sien après les manœuvres.  
Si donc vos vœux y prennent  
qui vos intérêts et la tenue  
à ma disposition après, j'en  
prendrai à mon que vos se  
vœux que je le fais copier  
ou même et ne vous en adresse  
la copie.

Je suis resté en manœuvres

FIG. 1 B

The "bordereau" after removal of the superimposed writing.

21. chaque officier détenteur doit
22. remettre la sienne après les manœuvres.
23. Si donc vous voulez y prendre ce
24. que vous intéresse et le tenir
25. à ma disposition après, je le
26. prendrai A moins que vous ne
27. vouliez que je le fasse copier
28. in extenso et ne vous en adresse
29. la copie
30. Je vais partir en manœuvres

Now this letter, torn to pieces, has been delivered by an Alsatian servant, probably the discharged concierge of the German military attaché von Schwarzkoppen, to the Intelligence Bureau of the French War Office. There the pieces have of course been put together again.

The original document reconstructed in this way was shown by the French Intelligence Department to five 'experts.' None of those five had either before served as an expert on handwriting, or published a treatise or a book, or read a paper on the subject. Not only were they amateurs, but three out of the five had never before been interested in handwriting at all, not even on purely amateurish lines.

They were Gobert, Bertillon, Pelletier Charavay, and Teyssonières.

1. *Gobert* was an employee of the Banque de France, an expert on forgeries of bank-notes. As a conscientious official, he was quite



aware of his own scientific shortcomings, advised the military authorities very cautiously indeed, and, though admitting some similarity in the general style of the disputed writing to that of Captain Dreyfus, pointed to the numerous differences between the two, stressed the naturalness of the writing movement in the *bordereau*, and reported that in his view the disputed document could just as well have been written by somebody else.

His report displeased those in charge of the prosecution so much that they completely discarded it and ordered the arrest of Captain Dreyfus at a time when they had not yet in hand a single report to testify to the offence of the accused.

2. Such a report was expected from *Bertillon, Chef de Service d'Identité Judiciaire* at the *Prefecture de Police*, the son of the finger-print expert of international repute. Bertillon did not know anything about handwriting either, but though first hopelessly at sea he would not admit his incompetence. Instead, he invented some ingenious 'graphometric' method of his own, by which he alleged he could establish with mathematical accuracy the genuineness or spuriousness of any writing. It was only a few years later that three scientists of the *Institut de France* showed that Bertillon was lacking in the knowledge of the most primary principles of

the law of probability on which his ' mathematical proof ' was based.

Bertillon's main conclusions were roughly as follows :

The *bordereau* is a strange mixture of the natural handwriting of the culprit on the one hand, and parts of some text which have been cleverly traced from the minutes in the files of the French War Ministry on the other (hence the use of transparent paper).

This conclusion sounds so incredible that I feel I have to re-cast it in some plainer language to make it comprehensible to the unprejudiced reader. What Bertillon actually meant was this : Captain Dreyfus traced certain passages of secret military documents on transparent paper, a word here and another there, spread over the two pages of the *bordereau*, leaving sufficient interspace to be filled in later on in a disguised hand.

How did Bertillon demonstrate his theory ? He pointed out that a number of polysyllables and even some monosyllables which repeatedly occur in the text of the *bordereau* are not only similar but actually congruent, which means absolutely identical in size, shape, connections or disconnections, inter-spaces, pressure, and so on. He produced a transparent graph-paper with squares of five millimetres, and showed how the repeatedly occurring words fitted the frame in the same way.

The authorities did not take the trouble to examine the correctness of this claim, though it should have been a matter of course for them to have those words photographically enlarged in the same scale and then only to superimpose a transparent graph. Nowadays this would be the first thing any expert would do. *Fig. 2* shows what the result of such a procedure would have been. We have chosen two polysyllables for our demonstration, viz. the words 'artillerie' occurring in the eleventh and fourteenth lines, and the word 'manœuvres,' occurring in the twenty-second and thirtieth lines.

Our photographs show enlargements one to four, and the superimposed graph-paper of two millimetres, so that our demonstration is ten times more precise than that of Bertillon could have been. If the words had really proved to be congruent, Bertillon would have been entitled to the suggestion that both words must have been traced from the same model, and his hypothesis that the secret files of the Ministry must have served as that model would have sounded very plausible indeed. But his argument breaks down entirely in view of the fact that our enlargements definitely prove that the two words, though similar, are certainly not congruent.

Questioned whether it would not have been much simpler for the culprit to write the whole document in a disguised hand, Bertillon

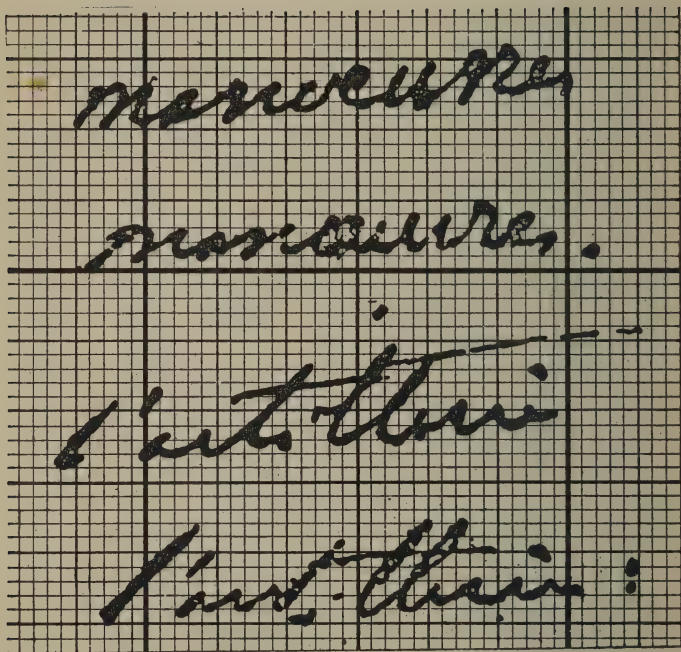


FIG. 2.

Graph-paper superimposed on an enlargement of two identical words of the "bordereau."

advanced some complex theory to show that so diabolic was the traitor that he preferred to complicate the issue rather than to work on some easier and more successful lines. True, he might have misled anybody, but not so clever a man as he, Bertillon, was.

The War Office was only too willing to charge Dreyfus, but they simply could not follow the argument, and Bertillon's confused lecture did not make them any wiser. They were used to think in terms of tactics and strategy, and wanted to know why precisely a man should prefer to make a detour when there was a short cut at hand.

This was the moment for Bertillon to present his masterpiece, the diagram of his *Citadelle des rébus graphiques* (See Fig. 3.)

We know now that it was the work of a distorted mind, but this was by no means so evident in 1894.

The reader, inclined to complain of the smallness of our picture, which prevents him from entering into the mystical secrets of Bertillon's scheme, may be assured that neither a full translation in plain print nor a commentary of the length of a big book would make this product of an obsessed mind more intelligible to him.

If there was any method at all in this madness, then the document was meant to show how in a twofold attack Dreyfus proceeded to conquer the citadel of those





features in handwriting which are bound to puzzle and mislead anybody of a less keen intellect than that of M. Bertillon. On the other hand, according to Bertillon, Dreyfus made provision for a fivefold defence (two in case of an attack from the left and three for one coming from the right).

It is all pure madness.

3. *Pelletier* compared the *bordereau* with ten specimens of Dreyfus' handwriting which the War Office supplied. Some of these were written under normal conditions, others with a gloved hand, others again while Dreyfus was performing his duty and had to sign some document standing upright with full military panoply of uniform and sword.

He found some insignificant similarities, but so numerous dissimilarities that he was convinced that the *bordereau* was not written by Dreyfus. He also strongly contradicted Bertillon in stressing the fluency and naturalness of the *bordereau*. No wonder that the authorities discarded his report. General Mercier suggested his consulting Bertillon, but Pelletier refused, giving as his reason that he could not possibly consult a fellow-expert who had already arrived at some definite conclusion, and who on top of that had never before served as an expert on handwriting.

4. *E. Charavay*, collector and auctioneer of rare autographs, thought the handwriting in

the *bordereau* to be disguised, the dissimilarities being due to the disguise and the numerous similarities to Dreyfus' hand. Charavay accepted Mercier's suggestion and did consult Bertillon to bring his own arguments into line with Bertillon's.

5. *Teyssonières*, an engraver, also obediently saw Bertillon, accepted all his arguments, supplementing them by some observations on the shape of characters which his professional ability allowed him to notice more accurately. So accurately indeed, that he picked out from over twenty specimens of Dreyfus' writing single characters which occur only once to show that a similar shape of the same character occurs, though also only once, in the *bordereau*. In this way he stressed one similarity to discard at the same time hundreds of dissimilarities. He thought it his duty to report what he was expected to report. It was only seven years later that he was convicted of perjury and his name expunged from the list of experts.

We see that out of the first five experts engaged by the French War Office, two were really experts and had mastered their science as well as could be expected in their days, whereas of the three amateurs one was a mental case, one a crook, and Charavay a man who was under the influence of somebody whom he regarded as a higher authority and who was besides strongly recommended to

him by General Mercier. We shall see that he confessed to his error later on.

On the evidence of this testimony Dreyfus was convicted in his first trial.

. . . . .

Three years later the brother of the condemned man, Mathieu Dreyfus, submitted the reproduction of the *bordereau* published by *Le Matin* to twelve handwriting experts. He selected the best known of six countries. The names of most of them are forgotten by now, but two have played a prominent part in the history of our science, viz. W. Preyer, a noted German scientist of English extraction, and J. Crépieux-Jamin, the highest authority on the psychology of handwriting in the French-speaking world, author of many books in which the foundations of empirical graphology have been laid.

The other ten were: J. Bridier (France), Hurst, de Rougemont, P. Moriaud (Switzerland), de Marneffe (Belgium), de Gray Birch, T. H. Gurrin, M. J. Holt Schooling (England), Carvalho, Ames (U.S.A.).

None of these twelve experts knew that the block-print in *Le Matin* which they had to examine was not made from an actual photograph of the document, but from an engraving, which means a free-hand reproduction made by one of the first five experts, namely, Teyssonières. Nor did they know that the

document was originally torn to pieces and reconstructed in such a way that most of the traces of the destruction have not been reproduced. No wonder they were puzzled by the stiffness, and in fact lack of rhythm, in some parts of the writing, for which they would easily have accounted had they known that the reconstruction of the document actually distorted the original fluency of some parts of the writing.

We must bear in mind that in the present state of the case the name of the real author of the *bordereau* has not yet been mentioned, that Dreyfus was the only one suspected, and that therefore neither the first group of five, nor the second group of twelve, experts have been presented with Esterhazy's writing.

In spite of this fact, and also in spite of the mis-information about the true nature of the block which has appeared in *Le Matin*, it counts strongly to the credit of those twelve experts that *all* of them denied the identity of Dreyfus' writing with that of the *bordereau*. Some of them added that the document was suspicious because of certain interrupted, in fact inhibited, strokes. From the scientific point of view their report was better than that of those who did not make such a reservation, because the examined document was really an engraved copy only, which by its very nature could not possibly have



been produced with fluent and rhythmical movements.<sup>1</sup>

It was only a few months later that Esterhazy, the real writer of the *bordereau*, was for the first time suspected. The demand for the facsimile published in *Le Matin* was so great that it had to be repeatedly reprinted. Among the hundreds of thousands who saw it was also a banker, who used to receive letters from Esterhazy almost every day, and was positive that he recognized his client's writing at a glance. He could be trusted to pick out Esterhazy's out of any number. To this banker it was at once evident that the *bordereau* was in Esterhazy's hand, and from him Mathieu Dreyfus received the first clue to the real culprit.

But Mathieu, the brother of the condemned man, was not the first to follow this particular track. Unknown to Mathieu Dreyfus, strange things had happened in the meanwhile in the closeted rooms of the French Intelligence Department. There was one officer who would not take part in the staged frame-up against Dreyfus. Colonel Picquart, who had become the chief of the Intelligence Service after the Dreyfus trial, received from one of his secret agents torn fragments of a telegram card, the so-called *petit bleu* (letters

<sup>1</sup> J. Crépieux-Jamin: *L'Expertise en Ecriture et les Leçons de l'Affaire Dreyfus*, *L'Année Psychologique*, publiée par A. Binet, XIII, 1907, Paris.

or cards sent with the express pneumatic post had to be forwarded on blue forms supplied by the post), which revealed intimate relations between Esterhazy and the German military attaché von Schwarzkoppen.

But this was not all. Picquart was also warned by another agent of his who doubted Esterhazy's integrity. Picquart collected specimens of Esterhazy's hand, and was at once struck by the similarity it showed to the *bordereau*. To him the identity of the two was beyond doubt. But he was not an expert, and had to gain Bertillon's confirmation before coming out into the open.

And to him he went. When shown one of Esterhazy's letters, Bertillon also at once emphatically declared that it was the same writing as that of the *bordereau*.

'Don't be too hasty,' replied Picquart, 'examine thoroughly.'

'No need for that; a fool can see that it is Dreyfus' writing.'

'But it is not', insisted Picquart. 'It is an established fact that it has been written by another officer.'

Bertillon was thunderstruck. 'Then the Jews have at last succeeded in getting an exact imitation of Dreyfus' writing.'

Picquart could hardly have had a stronger proof of the correctness of his judgement. This 'imitation' was a request addressed by Commandant Esterhazy to the Minister for War.

He presented his facts to his military chiefs and declared that he was convinced of Dreyfus' innocence.

'What does it matter if the Jew stays on Devil's Island? . . . the affair must not be stirred up again. . . . No one will know anything about it if you say nothing. . . .'<sup>1</sup>

Picquart saw his duty. 'I don't know yet what I shall do; but I will not take this secret to the grave with me.'

But the authorities did not mean to give him a chance to stir up the case again; they transferred him to Tunis. From there he returned to Paris to tell his secret to a lawyer friend, who again secretly passed the secret on to Scheurer-Kestner, the venerable Vice-President of the French Senate.

Scheurer-Kestner saw the War Minister, his friend, and the President of the Republic, about it, offering them the proofs of Dreyfus' innocence. Neither gentleman would listen to him. The Government was in full agreement that the case must not be stirred up again.

Disgusted with these experiences, Scheurer-Kestner started talking to everybody about it, though not mentioning the name of the man he suspected. Mathieu Dreyfus saw him, and did mention Esterhazy's name. Only then did Scheurer-Kestner admit to him that he was suspecting the same man.

<sup>1</sup> *Dreyfus*, by Walter Steinthal.

Soon Esterhazy's name was on everybody's lips. This had to be stopped, and the easiest way was to bring the matter before a French court, and there to have the suspicion definitely discarded. Esterhazy, once cleared, could then successfully sue anybody for slander.

The case was framed up. '*Pour le beau geste*' Esterhazy had to apply for his trial himself. It was a staged mock-trial from start to finish. The witnesses for the prosecution were not allowed to speak, and the most important of them, Colonel Picquart, was heard in camera only. Even the handwriting experts enjoyed the privilege of that safe shelter.

They were three gentlemen, viz. Couard, Varinard, and Belhomme, and they knew perfectly well what was expected of them, and were certainly prepared to live up to those expectations.

All three agreed that the writing of the *bordereau* was not identical with that of Esterhazy. They made the best of the privilege accorded to them and pretended professional secrecy. It was only in the trial before the *Cour de Cassation*, fifteen months later, that their theory became known.

They picked out the shape of a few characters, such as the antiquated double ss, to show that they were very rare in Esterhazy's writing but repeatedly occurred in the *bordereau*. Incredible as it may sound, these

three wise men quoted instances of similarity as evidence of non-identity ! They admitted in court that they could not present any material proofs of the correctness of their judgement, since they had relied exclusively on their intuition ; but they thought it a remarkable thing that their " artistic " inspiration had led them to the same findings as the painstaking, elaborate, scientific, and in fact " mathematical " analysis had led M. Bertillon. If such a coincidence is not convincing, what is ?

But, to make it more convincing still, they ridiculed the twelve experts, pointing out that they had been frivolous enough to make their conclusions from a poor reproduction only. One of the three, in the trial at Rennes, went so far as to exclaim that he would risk his head for his belief that Esterhazy had nothing to do with the *bordereau*.

To understand the monstrosity of such a claim uttered by men who pretended to be experts, one has only to glance at *Plate I*, where the handwriting of the *bordereau* and some handwriting of Esterhazy have been arranged in such a way as to interpolate alternately two lines of the *bordereau* with two lines of Esterhazy's admittedly genuine hand. As a matter of fact it does not take an expert to see the identity of practically all conspicuous features in the two interpolated writings.



Some of the conspicuous features common to both handwritings are :

A slightly rising line ; a regular, adequate interspace between the words (horizontally) ; a distinct interspace between the lines (vertically) ; the pasty thickness of the strokes throughout the whole script ; a slant which varies only very slightly from an average of forty-five degrees ; and of course the shape of very numerous medium and long characters, which, because of their imagery prominence, particularly lend themselves to individual shaping, e.g. *z*, *l*, *qu*, *p*, the alternate usage of two forms of *d*, the simplified, slightly bent shape of *f*, etc.

True, conspicuous features by themselves should not be regarded as conclusive evidence,<sup>1</sup> since it must be assumed that a skilled forger would not only be able to notice most, if not all, of them, but also capable of successfully imitating them. But there is after all a limit set to the application of this primary law of graphological interpretation. One similarity, even if it concerns the general style of the writing, counts for nothing ; two for little more ; three would still not be convincing ; four might be remarkable to a certain extent ; five certainly not to be discarded ; six possibly not yet conclusive, but already rather

<sup>1</sup> See *Experiments with Handwriting*, by Robert Saudek. George Allen & Unwin, London, 1928, or W. Morrow & Co., New York. Pages 154 ff.

d.

I

Les nouvelles on indiquent que vos  
 dires me vont par vous avec les regards  
 radieux. Je ne vous appelle pas les  
 services que vous ai rendus et une fois a  
 l'honneur que je vous envoie avec l'interfante  
 1<sup>o</sup> pour votre me la par le hydraulique  
 aussi à vos rendre, de ce fait de. Je vous  
 de par moi le de par le possible, de vous  
 de 120 de la maison. Vous êtes conduits  
 avec vous.  
 Je vous envoie avec, je vous envoie, mais me envoie  
 de votre part de je vous, je vous a toute en.  
 2<sup>o</sup> une note sur la troupe de combattants  
 (quelques modifications sont apportées par  
 vous, je vous envoie une fois avec la note, et  
 je vous envoie la troupe de la par d'officiers.



weighty ; whereas a dozen conspicuous features occurring in a fluent and rather rapid hand would form so strong an evidence that it would take a very remarkable dissimilarity of inconspicuous features to counterbalance them.

In the present case, however, there occur at the same time so many inconspicuous features, namely, peculiarities and idiosyncrasies of which the writer can be only vaguely, if at all, aware, that the identity of the two hands could not really be doubted by an expert.

What now are those features which the ordinary observer does not notice, but which tell an eloquent tale to the expert, who claims to be able to tell from a handwriting the idiosyncrasies of the writing movement?

Let us first compare the interpolated handwriting as a whole with that of Dreyfus.

Evidently Dreyfus' hand is easier to read than Esterhazy's.

Why ?

Because Dreyfus (*Figs. 4 and 5*) traces his characters, words and sentences while firmly grasping the pen in a self-certain, rhythmical, unimpeded routine-like way, being in fact concentrated on the subject-matter he is writing about rather than on his calligraphy. He is not afraid lest he should give himself away by actual features of his handwriting. His hand moves much more rapidly on the

paper. In this way the expert gains the impression of an inner self-certainty not impeded by caution, fear, and that self-consciousness which is due to 'bad conscience.'

Esterhazy's grasp of the pen is quite different. It is not firm but loose, the hand moves hesitatingly, the writing appears pasty, which means that the difference normally shown in the thickness of up- and down-strokes is greatly reduced. But in addition to that we notice that his movements are very lazy, so much so indeed that when writing inconspicuous small characters such as *e* or *i* he would not actually shape them as such, but with a lazy movement only touch the paper and write a blob or a thick dot instead of a distinct character (see *Plate I*); first line: *indiquant*, both *i*'s are simple and only slightly traced dots, which is rather remarkable because the one occurs at the beginning and the other in the middle of the word; second line: *désirez*, the *e* is traced like an *i*; *me*, the *e* has no shape whatever; the same holds good two words further on of the word *je*; *adresse*, of the antiquated *ss* the conspicuous second one is very marked, whereas the inconspicuous first *s* is so mutilated that it also amounts to a dot only; third line: *indigne*, the second *i* is a dot only; *Je*, the *e* is a dot only; *rappellerais*, not one of the inconspicuous small characters is traced in a legible way; fourth line must be read out



Mais tu feras des tranquilles et  
surtout, tu auras, sans misérable  
à me leurrer de celle de garnison que  
sont attribués aux jeunes gens  
ayant tiré au sort dans le  
IX arrondissement.

Prieux nous a l'honneur de ton  
Arrivée Soudain.

Amities à George. Bien cordialement

Prieux

FIG. 4.

et des uns à qui tu auras déboursé  
Pour le monde va bien là,  
dans une dizaine de jours, nous  
faisons une transporter dans  
notre nouveau local, 6 avenue du  
Gros Caillou

À t'embrasser

En dévotion

Alfred

À une charge de t'embrasser

FIG. 5.

Figs. 4 and 5. Two examples of Dreyfus' handwriting

first to be interpreted, because the writer's laziness was here already so dominant that he did not even take the trouble at all to write those inconspicuous features for which he has up to now at least put illegible blobs or dots. The first six words read: services que je vous ai rendus. Now instead of *je* he writes a short downstroke only, which looks like a comma, and omits the *e* altogether.

If now before comparing Dreyfus' handwriting with that of the *bordereau*, we examine first the differences which occur in the various writings of Dreyfus, we notice that of the two specimens reproduced here as *Figs. 4 and 5*, the first was written at a quicker rate. We can tell this because of the more extensive (centrifugal) movements which show in the prolonged thin *t*-bars tending upwards and in the much more pronounced width of the letter-forms (width and narrowness of a writing are determined by the length of the interspace between downstrokes of characters such as *m* or *n*, or in a larger interspace between the characters within the words, or again in a larger interspace between the words).

Now, in spite of the fact that the two facsimiles were written at a different rate of speed, either of them has been written more quickly than any of the writings of Esterhazy which the present author has seen. And in spite of this greater speed we do not come across characters of a very distorted or

illegible shape, but only some of a greatly simplified form without, however, actual omissions of characters.

In the present state of our science such characteristics have a prominent importance, whereas we attach only secondary importance to similarities and dissimilarities in the shape in which a man traced the twenty-five small characters of the alphabet. But we have of course to apply this method as well. Here the same rule holds good as in the evaluation of conspicuous features: (a) One, two, three similarities are unimportant, whereas eight, nine, or ten must never be discarded. (b) Habits concerning variations of two or three different forms for the same character, or of peculiar spelling or interpunctuation count for more than the actual shape of the characters.

But what of the interpolated writing, *Plate I*, where Esterhazy's hand is alternately inserted into the *bordereau*? Is the whole really one identical writing?

There we see that both the *bordereau* and Esterhazy's hand show numerous so-called 'covering-strokes', particularly in *a* and *o*. The term 'covering stroke' here means that instead of actual ovals first a simple short downstroke has been written, to be covered later on by an upstroke. (*Plate I*, Sans, 1st; pas, 3rd; hydraulique, 6th; pareil, 8th; mais, 11th; apportées, 14th; apprend, 15th

lines). No such covering strokes occur in Dreyfus' handwriting.

Further we notice that the way in which various small characters are connected within the words is very much alike in Esterhazy's writing and in the *bordereau* (Plate I, *vous*, 2nd and 3rd lines; *rendre*, 4th; *renseignements*, 5th; *indiquant*, 1st; *conduite*, 9th, etc.), while Dreyfus' hand does not show any such similarities. Note also the similarity between the characters *m* (1st and 8th lines), *r* (4th and 5th lines), *e* (et, 4th and 9th lines), *o* (1st nouvelles, 2nd *vous*, 3rd *vous*, etc.), the latter form being particularly important since it occurs alternately with the shape of a covering stroke mentioned above.

In some other parts of these documents we find double characters such as *ss* and *ff*, which look very much alike in the *bordereau* and in Esterhazy's hand, but different in Dreyfus' writing.

Apart from the similarities of the many inconspicuous letter-forms, we find also a remarkable conformity in the size-ratio of the characters. The reader will notice that the size of the small characters varies in about the same degree both in the *bordereau* and in Esterhazy's hand, while in Dreyfus' writing the small letters show a much greater uniformity. Further we observe that in Esterhazy's writing and in that of the *bordereau* the upper projections in *f*, *l*, *h*, etc., are larger

than the strokes or loops below the line in *g*, *p*, *y*, etc.; the opposite size-ratio is to be found in Dreyfus' hand.

On the other hand, there are a number of conspicuous and inconspicuous features which Dreyfus and Esterhazy have in common, and we can therefore understand why even the bona fide experts have been puzzled by these similarities. Here are a few instances: Both writings are decidedly simplified, small, neglecting (though in a different degree) inconspicuous characters, particularly those which any reader can easily guess from the context. There are only slight variations in the slant. Both writings are spaced in a way which is typical of distinct thought, a good surveying power, and that authoritative personality which may be inborn but which in the present case may be due to the specialized training of Staff officers. Both men have a good surveying power, readiness of wits, the capacity for improvisation; but both show also caution and reserve. After all, they are men of the same nationality, of about the same age, profession, and training.

All these factors count in some way or other more or less in the shaping of handwriting.

In spite of this fact, and after having made full allowance for similarities of conspicuous as well as of inconspicuous features, and of a number of psychological traits common to



both writers, we cannot but decide that the overwhelming number of similarities of the inconspicuous and of the conspicuous features show that the handwriting of the *bordereau* must be attributed to Esterhazy with a probability so great that it amounts to a practical certainty; whereas for the opposite reasons we cannot but declare that the non-identity of Dreyfus' writing with that of the *bordereau* is practically certain.

In view of the overwhelming evidence of so many similarities, both conspicuous and inconspicuous, the defence of Esterhazy could not even try to stress the dissimilarities. Therefore the pretence of identifying Dreyfus' hand with that of the *bordereau* was abandoned and instead the claim put forward that the *bordereau* was a clever imitation of Esterhazy's writing by Dreyfus!

. . . . .

So far, five, twelve, and three experts have been engaged in the case. Of these, fourteen testified that the *bordereau* was not written by Dreyfus, three that it was written by Dreyfus, and three that it was not written by Esterhazy: the question whether it was written by Dreyfus not having been put to the last three.

Two days after Esterhazy's acquittal, Clemenceau's *Aurore* published Zola's famous

letter *J'Accuse*, which stirred up the whole world ; though as a writer Zola had still to meet a good deal of adverse criticism in his own country, his fame in other parts of the world was undisputed.

In eight paragraphs, Zola accused all those who had so far been concerned with what he rightly thought to be a deliberate miscarriage of justice. About the three handwriting experts who served in the Esterhazy trial he says : ' I accuse the three handwriting experts, the men Belhomme, Varinard, and Couard, of having made untrue and fraudulent reports, unless a medical examination should prove them to be stricken with an affection of the sight and judgment '.

The counsels for the defence, Maître Labori and the brothers Albert and Georges Clemenceau, aimed mainly at one thing. They wanted to have the original *bordereau* produced in Court. After all, only two persons were suspected of having written the *bordereau*, viz. Dreyfus and Esterhazy. Therefore, the Counsels held that the authorities had only to supply the specimens of handwriting of the two officers, and allow real experts to compare them with the *bordereau*.

But the authorities refused to do so. It was their tactics at any price to discredit the report of the twelve independent experts whose verdict was in favour of Dreyfus. Therefore they decided not to allow the

original *bordereau* to be produced and, accordingly, not to accept those twelve reports which were based on an allegedly poor reproduction only. To strengthen their argument, M. Couard, one of the last-named three amateurs, declared that the reproduction examined by the twelve experts had no resemblance whatsoever to the original. Between the advocates of the defendant and Couard, a tragi-comic controversy took place. We are quoting from the official minutes of the Court :

‘Maître Clemenceau : Since the witness has examined the original, he could certainly tell us what exactly the similarities and dissimilarities between the original and the published reproduction are.

‘Couard : I am going to tell you ; the difference is such as exists between two things which do not resemble each other at all.

‘Maître Labori : I suggest that there are no differences whatsoever. Monsieur Couard, who has to defend his *expertise*, which is certainly no easy task, would of course insist on saying that he has worked on quite a different document from the others.’

But the tragi-comedy did not end here. Bertillon himself went into the box and tried to explain his confused theory once more with the help of his *Citadelle des rébus graphiques*. The public was rather amused, but only a

few officers in uniform seemed to be puzzled by so much ingenuity.

A number of new experts followed, all men of high scholarly and social standing. Here is a short summary of their depositions:

Paul Meyer, director of *l'Ecole de Chartes*, held that the slight differences in the various facsimiles could not possibly handicap the comparison where only the similarities in the letter-formation were concerned.

Auguste Molinier, professor of *l'Ecole de Chartes*, said that, since the facsimile had been published to show Dreyfus' guilt, it should be exact. In a facsimile the strokes may appear thicker, but the connections of the characters and the general shape of the handwriting could not differ.

Emile Molinier, *conservateur* at the Louvre Museum, confirmed that in print strokes may appear somewhat thicker, but that neither the way in which the letters had been written, nor the letters themselves, could be radically altered. Any worker at the National Library who, if presented with the correspondence of Esterhazy, side by side with the facsimile of the *bordereau*, did not see that the two had been written by the same hand, would certainly be discharged for glaring incompetence.

But certainly more interesting were the depositions of Dr. Héricourt, who explained the uncertain movements typical of a forged

hand so plainly and correctly indeed that a student of modern experimental graphology could hardly improve upon his elucidation.

‘In a disguised hand the mind of the writer is almost completely concentrated on the model he tries to imitate. Therefore the fluency and spontaneity of a continuous, as it were unconscious and automatic, movement is lost. Instead of that the forger has to adapt the muscular movements of his hand to the actual needs of the moment, namely, the shapes he wants to reproduce. In these circumstances there is a far greater number of discrete motor impulses present, since the writing movement is discontinued much more frequently. Naturally, strokes produced in this way look trembling, though in fact no actual tremor is present.

‘Making allowance for these facts the engraver responsible for the facsimile of the *bordereau* has not done badly. Neither he nor in fact anybody could have helped frequently discontinuing his writing when tracing a model. Any such tracing would show those hesitations, uncertainties and interruptions which are however quite different from pathological tremor in handwriting.’

It was of no avail that after him three other experts, viz. Paul Moriand, Louis Havet, and Giry, testified on similar lines, since the generals were on the alert and knew how to manage a trial to make prejudice, hatred,



'national honour,' and forgery triumph over truth and justice. With quite a series of splendidly-staged improvisations they succeeded in diverting the court's attention from the main issue to some side-track, obscured by mysterious hints and resounding appeals to patriotism. Major Henry, a member of the Intelligence Service, himself deeply involved in some other forgery which served as part of the evidence in the Dreyfus case, but which does not concern us here, again made an attempt to save the situation. He hinted at some 'ultra secret' document which could not be produced without involving the country in a suicidal war with an alien Power. General de Pellieux brought passion to boiling point by asking the jury what would be left of France's honour if she lost confidence in her Army.

It was by these means that the generals carried the day and had Zola convicted. Clemenceau said afterwards: 'I was there when the verdict was given. And I confess that I was not prepared for such an outburst of rage. If Zola had been acquitted that day, not one of us twelve would have come out alive.'

. . . . .

After the conviction of Zola the cause of the Revisionists seemed definitely lost. Anybody who had ever committed himself in this struggle for fair justice was publicly

denounced, boycotted, discharged, prosecuted or even imprisoned. Leading politicians like Jaurès were not returned to Parliament at the elections, and papers like *Le Figaro*, which had up to the last upheld the cause of revision, wrote with evident relief that the case was definitely closed. Nobody could possibly foresee how soon things would change.

But strange things happened in the sanctuary of the War Office. To understand this one must know that in the trial of Zola a forged document had been produced which by itself was supposed to prove Dreyfus' guilt.

Now, shortly after the Zola trial, Captain Cuignet had been entrusted with the reclassification of all the secret papers of the Intelligence Service. He came across that document, a letter supposed to have been written by the Italian military attaché, in which the latter promised that he would not mention his own and his German colleague's relations with Dreyfus. Of this document so far only photographs had been shown.

Now, with this document in hand, Cuignet was struck by the fact that the sheet consisted of two different sorts of paper; the upper part containing the addressee phrase 'My dear friend' and the bottom part with the attaché's signature appeared bluish when held against the lamp, while the main middle part containing all the relevant facts appeared reddish.

Evidently this was a forgery, and only Henry, who was in charge of these particular files and who had produced the photograph of the document and misused it to its fullest value as a piece of evidence, could be the forger.

When cross-examined by the Minister for War he broke down and confessed. He was arrested and committed suicide in the prison cell. So at least runs the official report.

When Esterhazy heard of this he at once, without even taking formal leave, fled first to Belgium and then to England. Public opinion, interpreted his flight as an admission of guilt, though some newspapers contented themselves with condemning the forgery, yet holding at the same time that the incident was irrelevant so far as Dreyfus' guilt was concerned.

Some time later Esterhazy actually confessed, in an interview to *Le Matin*, that he had written the *bordereau*, alleging that he had done so at the request of the late Chief of the Intelligence Office, who simply needed a piece of evidence against Dreyfus. Esterhazy would hardly have dared to do so, had the man whom he slandered in this way been still alive.

. . . . .

The tragic events around the Dreyfus case have by no means ended with the definite

proof that the two main pieces of evidence for Dreyfus' crime had by now been publicly recognized as forgeries. There followed the proceedings of the *Cour de Cassation*, the second court-martial at Rennes, a second conviction of Dreyfus brought about by new evil and mean tricks of the military authorities and finally his amnesty. For another six years Dreyfus had to wait for the rehabilitation of his personal honour and military rank. The Chamber of Deputies changed, Ministries came and went, and the Republic elected a new President. Then and only then had the mentality of the French nation gone through that process of purification which made it possible for the President to declare Dreyfus a free and honest man, an officer who deserved promotion, and a citizen worthy of the *Légion d'Honneur*.

But with this stage of the proceedings we are not here concerned. We may only mention that in the trial before the *Cour de Cassation* and at the court-martial in Rennes Charavay honestly admitted his mistake, while Bertillon up to the last moment insisted on those ideas which had completely taken possession of his distorted mind, and that he brought with him a new pupil of his, Valerio, who confirmed the correctness of every word of his master. But their ridiculous claims no longer concern us.

We have set out to show how honest and

how dishonest experts on handwriting fared in the various stages of the famous trial, how they did or did not stand up against the handicaps imposed on them, how far the science on which they had to rely in their judgements was advanced in their days ; and finally, what lessons the experts have learned from these experiences and what lessons some of them have still to learn.



### III

#### SIMILARITIES AND DISSIMILARITIES IN HANDWRITING

THE doubts and errors of the various experts in the cases of Dreyfus and Esterhazy were, as we have seen, mainly due to three causes. It was a threefold uncertainty which more or less dominated the minds of all those who had to judge the authorship of the *bordereau*.

And we have now to answer the question in what respects, and how far, our science has since then definitely improved upon previous methods of investigation.

Here are the three points with which we are mainly concerned when trying to answer this question :

(1) The principle that absolute identity in every stroke of two specimens is conclusive evidence of actual tracing has been correctly recognized, but applied in the wrong way.

We can safely say that in the present state of our science such a mistake could not happen again. Photographic enlargements of such passages in two specimens, made to the same scale, would always show with absolute

accuracy whether we are confronted with a tracing only or with real writing.<sup>1</sup>

(2) The judgement whether two hand-writings look alike or different seemed to be merely guess-work, based on the personal impressions and inspirations of the experts, rather than on accurate statements which could be checked by definite standards. Evidently there were no such standards by which to establish how far two specimens of the same person's writing can be supposed to vary, and how many, and which, dissimilarities in two specimens carry sufficient weight to establish the non-identity of the writers.

Some ten or twenty years ago, all experts agreed that so consistent and numerous similarities as are found in the two undisguised hands of Esterhazy's, which we have seen in the facsimile where Esterhazy's undisputed writing was alternately interpolated with passages of the *bordereau*, definitely prove the identical authorship of the two writings.

At that time it seemed that such a conclusion would carry the weight, not only of so overwhelming a probability that it would amount to practical certainty, but also the reliability of a hundred per cent certainty.

This view cannot be held any longer in the present state of our science; theoretically

<sup>1</sup> About the various methods of pouncing, see Chapter VII.

speaking, it seems that we have in the course of the last few years lost some ground which our predecessors thought to have definitely gained.

It is true that even now such a conclusion would hold good in most cases, and there is not the slightest doubt that it would be unquestionably accepted in any court as a sound argument, plausible to the layman and backed by the scientist.

Still, the fact remains that there are exceptions to the rule, plausible and irrefutable as it may appear.

Recent research on identical twins has enriched our experience by material of which previous experts on handwriting did not dream. *Fig. 6* is a particularly good example of what the research on identical twins has revealed.

It is a natural, quick, spontaneous, and fluent American writing which, by the way, shows all those particular swinging writing movements which are practised in American schools. Any expert would recognize it as the handwriting of an intelligent young American girl, and even if he went through a detailed description of dozens of individual features occurring in the writing, he would on no occasion be puzzled by any inconsistency of style, shaping, size, pressure or what not.

Now, this simple piece of writing, which in no way suggests any enigma, is as a matter

However, I think your  
and plans are very interesting  
comply with your requests by  
and samples of handwriting,  
we gain? Will you send up  
and also your analysis of all  
by answering some of the  
rather a lengthy and detailed  
but hope it may assist you  
readable. If you find it  
to desire make analysis, so  
we are more than glad to  
you in a...

FIG. 6.

Handwriting of two identical sister-twins reared together. There is hardly any difference between the first six lines of the one and the following six lines of the other twin.

of fact not the handwriting of one person, but an interpolated writing of *two* individuals. It is out of the question that ten years ago any expert would have admitted the possibility, even were it only theoretical, that various parts of this specimen have been written by different persons; and it is quite as inconceivable that any court would have accepted the report of an expert who would, in spite of those evidently irrefutable similarities in a quick, natural and fluent writing, claim that it had been written by two persons and not by one only.

What now are the actual facts? The first six lines were written by Benita L. C——, and the final six lines by Minnetta L. C——. They are twin sisters, and were twenty when they wrote these two letters of which parts occur interpolated in our facsimile.

But they are not only twin sisters, but also what geneticists call 'identical twins', which means that on the strength of a great number of definite similarities of physical features it has been established that they have grown from *one* fertilized egg.

Of these identical twins it is supposed that they equally share the same physical and mental inheritance. For this reason physiologists, biologists, psychologists, and psychiatrists anxiously study identical twins, because it may be assumed that any physical and mental differences shown in identical



twins must be due to environmental influences, and because in this way science hopes one day to establish how far human personality is shaped by genetic (inherited) influences, 'nature', and how far by actual experiences (environment), 'nurture'.

The two girls whose specimen writing we have seen have grown up in the same environments, went to the same schools, and insisted on not being separated. The result of equal heredity and equal environments was an almost identical personality, so far as we can judge from their handwriting.

The reader may be inclined to assume that this miraculous and striking trick of creation, in which nature herself seems to refute her eternal principle that no two living creatures should be completely alike, is after all not so surprising as it may seem at a first glance; and that one may safely expect that identical twins reared in identical environments would necessarily show the same personality and consequently also the same handwriting.

But this is by no means the case. As far as I know, I have examined the greatest number of handwritings of identical twins, both reared together and reared apart; but I can claim to have found identical handwritings only in five per cent of the number of pairs.

It follows that, should in a civil or criminal case the striking and convincing similarity of

two handwritings be claimed as due to the joint authorship of identical twins, and even should the presence of the other twin be proved, the claim could still be accepted only with a probability of one in twenty.

In the other nineteen pairs, we shall find two quite different writings, or at least two writings with such similarities only that any court inclined to judge merely from conspicuous features would dismiss their identity.<sup>1</sup>

*Fig. 7* shows the handwriting of two identical twins also reared together, very similar in their emotional life, sharing each other's likes and dislikes, though each has chosen a different career in later years. Their physical appearance is such that up to their girlhood they were often mistaken for each other even by their most intimate friends. But here we see two different writings or at least different in most conspicuous features. The differences in their professional career and in their likes and dislikes in adult age have evidently influenced the shaping of the two now distinctly individual writings.

The case of identical twins is of course rather exceptional, since statistics show, that only one pair of twins is born out of 85.2 children, and that there is approximately one pair of identical twins to three of fraternal twins, which means those grown from *two*

<sup>1</sup> See also 'The Handwriting of identical Twins' in *Character and Personality*. Vol. I. Nos. 2 and 4., Vol. II, No. I.

I hope I have be  
you ~~with~~ the informati  
but we shall be glad  
I hope I shall have  
the pleasure of seeing  
you & Mrs Sandek  
down here soon. I will

FIG. 7.

Handwriting of another pair of identical sister-twins reared together. The handwritings are different.

DECEMBER	Zondag	Maandag	Dinsdag	Woensdag	Donderdag	Vrijdag	Kerstmis	Zaterdag	Kerstmis
	20	21	22	23	24	25		26	
	<p>Beste Koningen - Conform afspraak kon je heden avond thuis blijven  Ik heb dan ook gerustmen bij hier op je gewacht doch je bleef on-  lichtbaar en dat nog wel op vrie eerste conferentie in 1931.  Je begrijpt dat gaat mij verdoond ergeren.  Memoreer toch dat ik je honderd duizend gulden schuldig ben en  dat ik uit dien hoofte mag verwachten dat je mij niet meer  verkomendeheid en respect behandelt.  Ik ben morgen avond te zelfde tijd hier.  : W. Schanier.</p>								
	<p>Ter beantwoording van mijn laatste  brieft heb je licht 4 dagen nodig!  Ici tiva bica mungant lech lekas binatang!</p>								

FIG. 8.

A Dutch I O U which formed the main part of the evidence in a charge of manslaughter or murder.

fertilized ova ; so that out of 340·8 children only one pair of identical twins is born.

This ratio has to be further multiplied by twenty (since in only five per cent of all identical twins reared together an identical handwriting is found).

We come then to the figure 6816 ; therefore instead of speaking in a general way of 'practical certainty' we should rather say in plain figures that our statement is valid with a probability of  $\frac{6814}{6816}$ , or  $\frac{3407}{3408} = \cdot 999706573$ .

But this is not the whole story. Over and over again it has been claimed that no two persons have ever written so similar a hand that they could mistake somebody else's writing for their own ; that it is certain that the typical features of one handwriting could never occur in quite the same way in another handwriting.

And as a simple argument for the correctness of this claim it was said that nobody could possibly take someone else's writing for his own.

We know from rather frequent occurrences in the courts that there are cases of disputed handwritings where people were unable to declare on oath that a signature was or was not their own.

To prove what a unique phenomenon our individual handwriting is, some authority has demonstrated that there are at least 177 ways of writing the figure 1, and that if one

considers that there are 26 capital and 26 small letters and 10 figures, which makes 62 symbols altogether, and leaves out of account the complicated shape of many of these characters, accepting only the number of variations which occur in the figure 1 as the average of the variations which occur in all these 62 symbols, one comes to the conclusion that the possibility of variation in each handwriting is expressed in a figure of such astronomical dimensions that it exceeds the number of the population which could possibly ever have lived on our planet. —

And this statement has been taken as a means to show that it is impossible that two persons should ever write the same hand.

The reader will understand that this argument is misleading, and in fact proves something quite different: namely, the fact that absolute identity of all features, were it only in a single word, is conclusive evidence that the word has been, not written twice, but actually traced.

The astronomical figure which has been stressed, with great though misplaced eloquence, rather illustrates the fact that nobody is capable of unalterably and consistently repeating precisely the same features of his own handwriting.

We have already seen on some previous occasion that, whenever a comparison between two handwritings is made, there are always



some dissimilarities present even where the two specimens are admittedly genuine writings of the same person, written at the same place and the same time, and with the same writing materials.

We always notice some variations and the question raised in any examination of genuineness or spuriousness is not whether the two writings are absolutely consistent, but rather

(1) Whether there are such variations as to carry sufficient weight to prove a natural writing movement, which means to exclude the possibility of actual tracing or of a free-hand copying.

(2) Whether the dissimilarities present are of such a character as to exclude the identity of the authorship of two or more documents.

The great problem with which we are concerned here, and with which an expert is concerned in any examination, is therefore whether science can draw a sharp line of demarcation between these two extremes, and tell us precisely :

(a) What sort of dissimilarities or variations actually prove the natural origin of a writing ; which means to what degree a natural writing is supposed to show variations and dissimilarities ;

(b) What sort of dissimilarities exclude the possibility of the identical authorship of two documents ;

(c) When are we confronted with one of those cases where similarities and dissimilarities counterbalance each other in such a way as to make it impossible accurately to establish the identity or non-identity of the writers of documents.

Were it not for the fact, that science cannot draw so sharp a demarcation line, we should hardly see experts in disagreement over an actual case.

As it is, a court which would insist in such cases on definite scientific proof before accepting an expert's report would have to do without handwriting experts altogether. Neither can we establish to-day some definite standard, rule or measurement of this kind, nor shall we probably ever be able to establish definite and accurate standards. We shall always have to rely on circumstantial evidence only and weigh the pros and cons.

True, our science has progressed remarkably. We have learned accurately to discriminate between conspicuous and inconspicuous features. We can prove to what degree every single feature in handwriting strikes the writer's eye;<sup>1</sup> to what degree it is easy or difficult deliberately to produce it; and which features are *almost* conclusively connected with one writer's personality and nobody else's. We can draw the circle of the

<sup>1</sup> See *Experiments with Handwriting*, pp. 141-155. London, 1928, Allen & Unwin; or New York, W. Morrow & Co.

given possibilities smaller and smaller, until according to the law of probability *hardly* any doubt is left open about the correctness of our judgment ; but we shall always have to apply words such as ' almost ' and ' hardly '.

Since now, paradoxical as it may sound, the proof of identity in law courts will in most cases be based not on actually identical or definitely different features, but on similarities and dissimilarities only, on impressions rather than on actual measurements, on guesses inspired by long and specialized experience rather than on accurate statements, we should never exclude the possibility that we may be mistaken once in a while.

Handwriting will never, and can never, be so reliable a means of identification as fingerprints are ; and occasionally we may come across cases where not only a man himself cannot tell whether he is confronted with his own writing or signature, but where also a skilled expert may be misled.

We certainly have no reliable statistics about the frequency of such border-cases of extreme similarity of two non-identical writings ; but I am personally rather inclined to believe that such cases are not less rare than those of identical writings of identical twins reared together. I even think that they are more frequent, and that we have to bear in mind this definite shortcoming of our science.

Out of every three articles I have written

in the course of the last few years on such like subjects one unavoidably brought me some correspondence from a reader who thought he had recognized among the illustrations the handwriting of an old friend whose address he had been trying to trace for years unsuccessfully.

In one case the managing director of a big industrial combine mistook the handwriting of a shoemaker for his own ; and in another case a mother mistook the writing of a man of thirty-six for that of her boy of twenty who had been reported as missing in action during the Great War.

After all, we no longer believe, as the first graphologist did, that the individual handwriting is necessarily exclusively conditioned by the writer's mental make-up.

Experimental graphology has, I think definitely, proved that there are at least thirteen other factors which more or less co-operate in the shaping of each individual handwriting, factors such as the nationality of the writer, the school copy from which he has learned to write, the muscular tone of his hand, his playful pleasure in the imitation of attractive forms, or of those which seem beautiful and impressive to him, his visual memory, his training for some particular profession, etc.

We can easily understand that two handwritings are bound to look more similar in

about the same proportion in which those factors, which two personalities have in common, are present.

In the case of Dreyfus and Esterhazy, we have seen that the fact that both were Frenchmen, of about the same age, staff officers who went through the same specialized training, etc., made their handwritings sufficiently similar in some features (such as simplification of forms, similar method of spacing and interspacing, etc.) as to puzzle many of the experts.

How much stronger will the similarity of two handwritings appear if there is a common psychological trait present in two personalities, for instance, if both have what we call a neurotic constitution.

In such a case, they would consistently reproduce numerous inconspicuous features in their handwriting, which means those very features to which we attribute strong weight of evidence. Both handwritings will then appear 'labile', with all those consequences connected with general indecisiveness of mind and will correspondingly show a general indecisiveness of handwriting.

More misleading still may be the similarities in the handwriting of two persons who, belonging to the same social stratum and living in similar environments, also suffer from the same sexual perversion. The criminologist knows that such cases are by no means



so rare in the courts as one would expect, since blackmailing and forgery are rather frequent occurrences among people dominated by the same perverted sexual emotions. They have an intimate knowledge of each other's habits, jealously watch each other's actions, and are skilful imitators of their partner's writing, particularly so because neurotic labile personalities have a much greater gift for fraudulent imitations than normal people have.

(3) In the trials of Dreyfus and Esterhazy there seemed to be no definite standard to establish whether, in spite of evident similarities in the shaping of the characters, in the general arrangement, and in the writing habits, a certain lack of fluency in the writing movement excluded the possibility of a genuine writing.

We know that practically all experts engaged in this case, those who worked on a preconceived theory to please the military authorities, as well as those who worked independently, were puzzled by the uncertain writing movements of the *bordereau*, and had to stress this fact as one of the main arguments at issue.

And my Dutch readers will remember how a lively dispute arose in a recent important criminal case at The Hague, as to whether a writing, though very similar to the genuine writing of some person, was really genuine, because of its lack of rhythm and its 'dead' appearance. (*Fig. 8.*)

Here again we are confronted with a problem which accounts for at least half of those cases on which the experts disagree in the courts.

It is true that normally the individual degree and the kind of graphic fluency, writing routine and rhythm is integrally connected with a definite personality, and that therefore marked deviations in this respect rightly make the handwriting suspect.

But normal cases do not usually come into the courts. It is in the very nature of things that handwritings are disputed because of some exceptional circumstances or conditions, and the expert who would rely on his 'normal' experiences only would therefore hardly prove an adequate examiner.

The causes which can distort a man's normal writing so as to make it appear unrhythmical instead of rhythmical, hesitating instead of fluent, clumsy instead of written in a routine-like way are threefold, viz. irregularities of the writing material, temporary <sup>or permanent</sup> physical unfitness, and temporary or permanent mental disturbances.

When none of these three groups of disturbing influences is present, we may safely assume that we are confronted with a forgery if a disputed handwriting shows that it was written at a rate of speed markedly slower than the habitual rate of the alleged writer ;

if, further, there was a frequent change of the grasp of the pen or pencil ; a much more frequent interruption of the writing, which means that it was produced with word-, letter-, or stroke-impulse instead of the habitual sentence-impulse ; if it shows numerous corrections and re-tracings, though the alleged writer normally writes fluently without correcting or re-tracing his text.

These features are called ' the primary signs of forgery ', and have been generally accepted in law courts all over the world. But in recent times it has been repeatedly shown that if it can be assumed that one or more of the three groups of possible disturbances were present, all these so-called primary signs of forgery may occur in a perfectly genuine writing. A badly working pen, with a rusty or uneven nib, ink rendered thick by impurities, an uneven pad, a particularly uncomfortable bodily posture during the act of writing, may retard the writing movement, impair its fluency, and make corrections and re-tracings necessary.

And the same may happen when the normal muscular equilibrium is disturbed by more or less noticeable cramp, by extreme cold or heat, by a suddenly accelerated blood circulation caused by mounting steps or running, or by rheumatic troubles, which may show one day and be absent another.

*Fig. 9b* has been written by a person who

man you think  
might be able to  
diagnose my trouble  
correctly, and help  
me, or tell me the

FIG. 9 A.

Dr. Sander at 6-30  
definite on Monday.  
June 4<sup>th</sup>.  
Yrs faithfully

FIG. 9 B.

Handwriting of a man suffering from rheumatism.

- a. Written during an acute attack;
- b. Written after the rheumatic troubles have yielded to treatment.

suffers from rheumatic trouble, but on a day when the trouble was less acute; *Fig. 9d* was written a day before. It is certainly slower, shows a more marked tremor, and has been corrected and re-traced.

For this reason, when the similarity of two writings is recognized by the experts, who however, disagree about the fluency and the naturalness of the script as a whole, the court should always try to establish whether the writer in question has not possibly suffered from muscular rheumatic troubles.

On the other hand, the public is rather inclined to take it for granted that also permanent physical infirmity is bound to disturb a man's writing.

This is by no means the case. The central nervous system adapts itself in an almost incredible way to the most fundamental deficiencies, if it is only allowed sufficient time for such adaptation.

I have demonstrated in another book of mine<sup>1</sup> foot-writings of children and adults, who were either born without arms and have from the outset written with their feet, or of soldiers who have lost their hands and learned to write with their feet, or who have lost all extremities and have learned to write with their mouths.

Given sufficient time for such novel training |

<sup>1</sup> *Experiments with Handwriting*. London, 1928, Allen and Unwin; or New York, W. Morrow & Co.



they almost invariably acquire perfect fluency when writing with another part of the body.

It remains to add to these examples another kind so far not yet described in the literature. In the cases just mentioned, the persons have always written with one limb

A sample of cursive handwriting on a light-colored background. The text is written in a fluid, connected style. The words are: "Thank you for your letter, quite convenient for me photographers on Saturday, quite looking forward to". The script is slanted and has a consistent loop and flourish pattern.

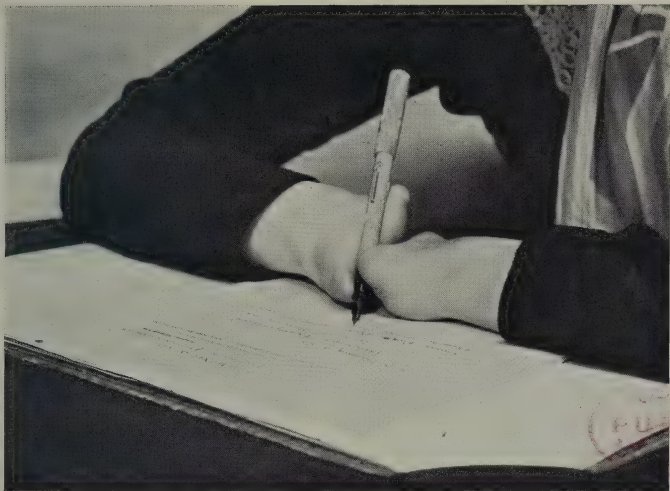
FIG. 10.

Handwriting of a girl with mutilated hands.

only, either with the right or with the left extremity.

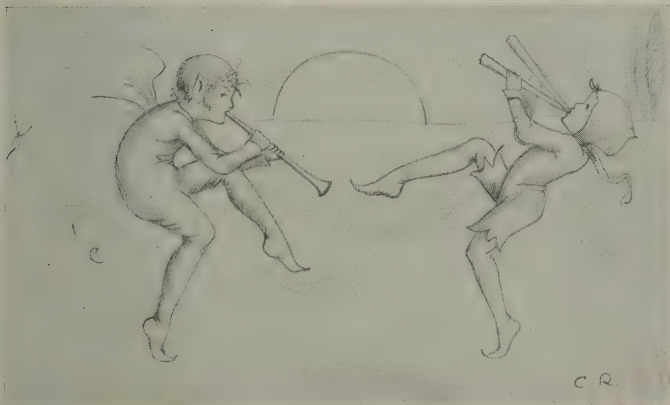
*Plate II* shows the writing position of a young girl who produces one writing movement by simultaneously using both hands. She was born without fingers, with both hands reduced to stumps, and *Fig. 10* shows her writing.

How skilful a drawer is the young lady, who by the way was awarded the annual scholarship of the Royal Academy of Arts, is shown in *Plate II*.



(a) GIRL WITH BOTH HANDS MUTILATED

When writing she holds the pen between the two stumps of her hands



(b) DRAWING BY THE SAME GIRL



## IV

### ANONYMOUS LETTERS

**A**NONYMOUS letters either bear no signature at all, or are signed by :

1. Some assumed initials, or
2. Such words as ' A Citizen ', ' A Taxpayer ', ' A Lover of True Art ', etc., if they denounce somebody's alleged crime to the authorities, or proclaim a colleague's alleged inadequacy to the managers of theatres, musical institutions, etc.
3. Such words as ' A Well-wisher ', ' An Old Friend ', etc., if they libel private persons.
4. Such symbols as crosses, daggers, skulls, fists, etc., if they threaten or blackmail.
5. Some assumed name, non-existent to the knowledge of the writer.
6. The name of an acquaintance of the addressee, to set the two at variance.

Since all anonymous writers are particularly anxious to conceal their identity, it is only natural that some of the means by which they expect to cover their tracks are common to most, if not all, of their letters.

Practically all anonymous writers try to create the impression :

1. That their libellous letters have been composed and written by some member of the lower strata of society, e.g. a domestic servant, a lady's maid, a chauffeur, or, anyhow, by an uneducated person. It is generally, though wrongly, believed that illiterate people are much more frequently given to such evil practices as the writing of anonymous letters ; but as a matter of fact, uneducated people write anonymous letters only very exceptionally, and certainly less frequently than educated ones.

2. That the letter has been composed and written by a foreigner. Here again, it is certainly amusing that people, whatever their nationality, assume that foreigners are more apt to shady tricks than their own compatriots.

3. That the writer knows more than he actually reveals, but prefers to see the effects of his first revelations before deciding whether he should go on or not. Even where no blackmail is intended, such a hint is supposed to strengthen the effect of the venomous missile.

Taking such a mentality of these writers for granted, we can hardly be surprised to find in practically all anonymous letters misspelt words, mistakes in grammar and syntax,



phrases which suggest the foreign origin of their authors, unfamiliar foreign words, low and vulgar language, and almost incredible obscenities.

The trick of using improper language usually succeeds in misleading the addressee. Only the police authorities and experts who have frequently to handle such cases know that ladies of high social standing, once they have stooped to anonymous libel, use such improper language as one would hardly expect to find among drunken sailors, and that old maids of neurotic disposition often find a safety-valve for their repressed emotional urges in such outbursts of obscenities.

At the same time they play up to their self-imposed part by trying to imitate some clumsy writing, with those ornamentations and flourishes which are typical of an unskilled hand and an illiterate mind.

Therefore the question arises of how we can tell whether such features, be they linguistic or graphic, are, as we expect them to be, only assumed, or whether they are by any chance really typical of the illiteracy and vulgarity of their authors.

Here again, as in all problems of handwriting *expertise*, only a discrimination between conspicuous and inconspicuous features can give us a correct clue.

Instances of both kinds of 'mistakes',

viz. deliberately inserted errors and inconspicuous (and for this reason unconscious) slips, will be shown in a specimen of a blackmail letter (*Plates III and IV*) in the next chapter.

Since any anonymous writer tries to disguise his own natural hand, we are in most cases confronted with one or more of the following peculiarities :

1. Some conspicuous features of the writer's natural hand have been changed, e.g. he writes a vertical or back hand instead of his natural slanting style ; he writes big characters instead of small ; he produces an embellished, flourished hand instead of a simple style ; he applies strong pressure whereas usually he writes with a slight or hardly noticeable pressure ; he makes his lines either conspicuously rise or sink instead of running them straight ; he tries to imitate either some foreign alphabet, or the striking features of somebody else's writing, on whose model he has practised before starting his own performance.

2. The letter has been written in printed style instead of the usual cursive one.

3. It has been written with the left hand though the writer normally writes with his right hand. He does so to make sure of the clumsiness of his writing and to safeguard himself against unwittingly falling back into his normal writing habits.

4. It has been produced with some unnatural, 'crampy' grasp of the pen, with particular writing-pressure, in fact, drawn rather than written.

5. It has been written with a badly-pointed pencil, because of the (by the way, quite correct) belief that the use of such inadequate writing materials would make the examiner's task of tracing the author much more difficult.

6. In numerous places parts of the handwriting have been re-traced or touched up, not really to make the writing more legible, but in the belief that such 're-tracing' destroys the clues of the author's natural writing habits.

7. The whole letter (or parts of it) has been written (in fact, drawn) first with pencil, and then completely re-traced with pen and ink. The idea underlying this procedure is that writing, regardless of its artificiality, so long as it remains writing, gives the writer away in some way or other, whereas the very technique of re-tracing excludes the possibility of 'real writing', by making the technique of slow drawing compulsory from start to finish.

The expert speaks of a natural, fluent hand as written with 'sentence-impulse,' of a slow, deliberate hand as written with either 'word-' or 'letter-impulse', and of these re-traced,

'drawn' writings as produced with 'stroke-impulse'.

If now an anonymous letter of this kind is submitted to us, from which features of the writing can we trace the writer, and what degree of reliability attaches to our conclusions?

The proof of identity or non-identity of two writings is practically always based on the principles of the law of probability.

There are only two cases in which our judgment can claim to be infallibly accurate. These two cases are :

1. If some text or a part of it, were it only a single word or a signature, in two specimens of writing is absolutely identical in size, shape, pressure, interspace of the characters within the words, and a dozen or a hundred other features, then it is absolutely certain that both cannot possibly be natural writings, and that one of the two is a re-traced copy of the other.

A hundred thousand signatures written by the same man, may, and probably will, look alike. A few of them may seem indistinguishable to the naked eye ; but one has only to photograph them to the same enlarged scale to notice hundreds of small differences.<sup>1</sup>

<sup>1</sup> The reader will remember that this correct principle was also applied in Bertillon's report on the Dreyfus *bordereau*. Bertillon's mistake was of course due to the fact that he thought identical what in fact proved to be different.

2. If the anonymous letter has been written with fluency and shows good writing routine, and if among those suspected of its authorship there are some whose normal writing does not show such highly developed penmanship, then the suspicion against these poor writers should at once be dismissed.

A skilful writer may easily pretend a clumsy hand, but a clumsy and slow writer cannot possibly disguise his inadequacy by writing a fluent and rapid hand. *can by practise* ?

In all other cases our judgment as to the authorship of an anonymous, and in fact of any, writing, is based on the circumstantial evidence of a more or less great number of features which, as the case may be, are connected with the subject-matter of the writing and the facts actually mentioned therein, or with the wording, the spelling, the inconspicuous features of the writing, some unconscious writing habits, and last, but by no means least, with the consistency or inconsistency with which certain psychologically typical (graphological) features do or do not occur in the anonymous or disputed document on the one hand, and the admittedly genuine writings of the suspected persons on the other.

It follows that the examiners' task will be the easier the greater the number of facts which could possibly have been known only to a very limited number of persons.



Certainly an anonymous letter mentioning only such facts as may be known to anybody, e.g. an insulting letter addressed to the Prime Minister of a country, may, for all we know, have been written by any citizen of that country and possibly even by an alien; whereas a defamatory letter about a love affair of the master's chauffeur with the lady's maid could have been written only by a very limited number of persons possibly interested in such an affair.

In the first case, we have no handwritings to compare with that of the anonymous letter, whereas in the latter case a comparison with the writing of the suspected persons will most probably reveal the culprit.

But what about those anonymous letters which are distributed on a wholesale scale to disturb the peace of whole communities, villages, towns, districts, counties, or professional bodies?

At such an outbreak of an epidemic of anonymous letters we have first to note what person's name is most frequently mentioned. It is a favourite device of those calumniators to include all sorts of evil gossip about themselves, to throw the addressees off the scent. For the same reason, it also often happens that the defamators are the first to report to the authorities by presenting with a lively indignation the libels they have addressed to themselves.

Whereas now the anonymous writers generally mention only such libels as appear rather plausible in some way or other, and sometimes really contain a grain of truth, though in a distorted or highly exaggerated form, they are very careful indeed to avoid in those letters which they have addressed to themselves and which they present to the authorities any such hints as could possibly injure their own reputation.

The local police authorities will in some cases be in a position to check up the allegations mentioned in the letters, and will in this way be supplied with the first clue to the identity of the writer.

The actual features of the handwriting will then be an additional help and make the detective work conclusive in most cases.

It is certainly no easy task to write a number of lengthy letters in a consistently disguised hand, since it is one of the primary rules of experimental graphology that the longer and the quicker one writes the more one is bound unwittingly to fall back into one's natural writing habits.

What then has the forger to do ?

There are only three possibilities open to him :

1. Either he spreads the actual work over a number of days, not writing more than one, or possibly two, letters a day, slowly accumulating the lot to be sent out only after the

last letter has been finished, should it be part of his scheme to circulate them all on the same date ;

2. Or he practises two or more different styles, writing each set of letters in one definite style, if it is his scheme to create the impression that quite a gang of forgers is at large ;

3. Or he will extend the variations by wording one letter in a literate and the other in an illiterate style ; or by using typically masculine or feminine language ; or by applying cynical language in the one case, hypocritical in the other, etc.

But only in very rare cases would he employ other people to have his own text copied by them. He would be careful enough to keep to himself and not to confide in anybody ; but also he would feel safe enough not completely to destroy the traces of his nefarious activity.

To understand this we must realize that in practically all cases we are dealing with psychopaths, with so-called ' hysteric personalities ', or with more or less advanced paranoia.

Now, it is true that such psychopaths, because of their not outspoken but more or less ' labile ' personalities, are more capable than sane people are of disguising their handwriting, and that in most cases they

actually boast of this talent, this being one of the reasons why their distorted minds centre on this particular activity.

But, on the other hand, these psychopaths often also show the methodical mentality typical of paranoia. They keep books, put down dates, file drafts of their venomous missives, and meticulously keep their writing utensils in good repair. Neither would they part with their collection of nibs and pencils of all shapes and styles, nor with their assortment of inks of various colours, their stationery, pads, ink erasers and what not.

Further, they generally suffer from that 'obsession of second thought', which does not allow their mind to remain at rest, but permanently suggests to them some better wording of this idea or that, once they have parted with their original version.

By mailing their anonymous letter they have by no means succeeded in freeing themselves from the complex of ideas, imaginations and emotions, which has set them in motion. As a matter of fact, the elated satisfaction about their deed soon breaks down, to give place to doubts about the efficacy of their scheme. And it is in these moments of doubts and depression that their defective minds find refuge in the study of the original drafts they have kept in their files.

It follows that by a domiciliary visit (where)

the law of the country allows a search-warrant, which it does not in England), the handwriting expert will be of a much greater help to the examining *police* authorities than when called upon only in the *Court*, where he has to rely on the demonstrable similarities in handwriting only.

He would tell the police where to look for the culprit, and a search on the spot may result in such conclusive evidence as features in handwriting by themselves can never produce. The blotter found in the defendant's home may contain the facsimile of the letter (reversed in mirror-like fashion); or the ink, when analysed or microscopically examined, may show the same impurities as the ink with which the anonymous letter has been written, etc.

But where there is no such conclusive proof, a conviction in court is by no means easy to obtain. Even if quite prepared to believe in the expert's efficiency, the judge is often quite unable to follow his arguments. Not being trained in noticing inconspicuous features in handwriting, he cannot help rather overrating the importance of conspicuous dissimilarities between the anonymous letter on the one hand and the suspected person's habitual hand on the other.

Since now many people who are not scientifically trained are nevertheless in many courts admitted as experts, and since they,



too, more often than not, are unable to discriminate between conspicuous and inconspicuous features, the judge and (or) the jury are naturally inclined to follow the amateur's argument rather than that of the expert, or anyhow, to give the defendant the benefit of the doubt which results from the disagreement of the experts.

As I have pointed out before, in some countries this state of things sometimes results in an unintentional class justice, because the wealthy defendant will always be in a position to secure the evidence of some amateur-expert who will with a clear conscience testify in his favour, whereas of the two witnesses called by the public prosecutor the one will be some locally reputed analyst (probably quite efficient in other lines of detection, but venturing only on amateurish lines in the *expertise* on handwriting), while the second man will be, almost infallibly, some subordinate detective in the police force who thinks it to be his sworn duty to back the prosecution.

## V

### AN ANONYMOUS LETTER OF BLACKMAIL

**I**T has been stated that almost every day in every big American city quite a number of wealthy people receive blackmail letters in which some anonymous writer or writers threaten them that they will kidnap them or their wives and children unless the addressee pays a definite sum in a definite way. Nobody knows how frequent these cases are. The authorities can only guess at their frequency since many citizens are so frightened out of their senses that they do not dare to pass the matter on to the police.

It is certainly true that some of those gangs or rackets often kill, injure, or 'take for a ride' any denouncer of whom they can get hold. But such brutal means of intimidation are, as a matter of fact, the exception rather than the rule. More frequent are the cases of untrained amateur blackmailers who do not proceed methodically, and are lacking in even the most primitive knowledge of their criminal profession.

Their threatening letters are worded and written in such a way that an expert can

rather easily discover sufficient clues as to their nationality, age, physical and mental health, or such idiosyncrasies as point to their identity once the number of the possible offenders has been narrowed down to some definite group of suspects or to some definite locality.

We are presenting here such a case. Our illustration (*Plates III and IV*) shows the blackmail letter which was received by a well-known citizen of a big town. The whole letter contains two pages, and its text runs as follows :

1. We are sorry to send this to you but we know it wont
2. hurt you
3. We want 2500 Dollars for the protection of your Familie and
4. *Children*. And we don't want the police mixed up in it
5. If you pay this little amount as instructed, absolute
6. mo harm will be done and no more letters send you
7. here is the instruction :
8. Wrap up in a square packet 2500 Dollars in 5-10-20
9. Dollars bills, no new ones, and send your chauffeur
10. to the corner of 34 Street and 8th. Ave, N.Y. Saturday nite

11. Februar 25th. at 8-30 *Sharp*. where there is a man selling
12. newspaper at the corner right outside NEDICKS Sodastand
13. Give the packet to him and ask him to mind it for
14. a while until somone later will pick it up. Put the
15. name of A. Swarts on the packet and give him 25 cent
16. tip for his trouble. Of course he don't know nothing about
17. it and *before we get it, we will easy have found out if*
18. *the police is in on it or not*, and if it is, we won't try
19. to get it at all, but we will take a ride out to a couple of
20. places on Long Island and throw a pineapple on your
21. estates there, just to show you we are not fooling, and
22. that we mean business. And then we will start
23. action, probably we wont have any luck before next
24. Summer, *but we never give up*, and next time we
25. send you a letter, maybe you will be glad to
26. pay 2500 Dollar. only there will be added an

We are sorry to send this to you but we know it must hurt you

We want 2500 Dollars for the protection of your family and children. And we don't want the police mixed up in it

If you pay this little amount as instructed, absolutely no harm will be done and no more letters and you see is the instruction.

Drop up in a square pocket 2500 Dollars in 5-10-20  
 Brown bills, no new ones, and send your checkup  
 to the corner of 34 Street and E<sup>st</sup> Ave, NY. Saturday night  
 about 25% at 8% drop. where there is a man selling  
 newspapers at the corner right outside REDICKS bookstore  
 Give the pocket to him and ask him to mind it for  
 a while until someone else will pick it up. Put the  
 name of A Swarts on the pocket and give him 25 cent  
 tip for his trouble. Of course he don't know nothing about  
 it and before we get it, we will say have found out if  
the police is in on it or not, and if it is, we won't try  
 to get it at all. But we will take a ride to a couple of  
 places on Long Island and throw a pineapple on your  
 estates there, just to show you we are not fooling, and  
 that we mean business. And then we will start





27. other O to it and maybe you still will  
be  
28. glad to pay it. thank you.  
29. V  
30.  
31. P.S. last warning : dont mix the police up  
in it  
32. if you dobled cross us, well you will take  
33. the consekvenses.  
34. And remember : a gun has a long reach  
35. but if you do as instructet,  
36. everything will be O.K. and we V  
37. guarante it will be the very  
38. cheapest for you

The reader will notice that the letter does not contain any particular information which would help us to narrow down the number of those who could be suspected of such a deed. We have to rely only on the features in the handwriting, on some peculiarities in style and spelling, or on some writing habits, to give the police authorities some definite clue where to look for the criminal.

While carefully reading the letter, we have noticed that there are strange mistakes in the

### *Spelling*

Instead of *family* (line 3), we have *Familie* ; instead of *instructed* (line 35), we have *instructet* ; (though the latter word has been spelt quite correctly in line 5).

Instead of *consequences* (line 33), *consekvenses*; instead of *sent* (line 6) *send* (though this word has been first spelt correctly, but evidently looked somewhat strange to the writer, so that he altered the correct *t* into the wrong *d*).

Instead of *night* (line 10) we have *nite*; instead of *February* (line 11) we have *Februar*; instead of *some one* (line 14), we have *somone*, and finally, instead of *throw*, we have *trow* (line 20).

Now, of all these misspellings, the one where *kv* was written for *qu* in the word *consekvenses* is the strangest. Therefore let us start our deliberations from this point.

Evidently the writer is not a born American, or, to be more cautious in the present stage of our examination, he could hardly have started his education in an American or English class.

We know that in Holland, Poland, and Czechoslovakia the *q* is used in foreign words only and not in the native language, and we remember that all these three countries border on Germany. To decide which of the three countries is the most probable, we have to consider some further circumstantial evidence.

The word *Februar* (for *February*), and the word *Familie* (for *family*) suggest a German writer, but the double consonant *kv* is unknown in the German language.

On the other hand, we may assume that

action, probably we must have our luck before next summer, but we never give up and next time we send you a letter, maybe you will be glad to pay 2500 dollar. only there will be added an other 0 to it and maybe you still will be glad to pay it. Thank you.

(V)

P.S. last warning. Don't come the police up in it, if you double cross us, well you will take the consequences.

And remember a gun has a long reach.

but if you do as instructed,

everything will be ok. and we

guarantee it will be <sup>the</sup> very

cheapest for you

(V)





somebody who could not help falling back into his native habit of writing would hardly have written *Februar* and *Familie* if he were not a German. The Dutch word *Februari* ends with an *i* and not a *y*. We may also assume that there would be rather frequent erroneous interchanges of *f* and *v* if the writer were Dutch.

Suppose now he were a Pole, then he would most probably have written *kw* and not *kv*. Besides, he would hardly have written *Februar*, since the Polish word for the second month of the year has no similarity whatsoever with the English *February*, the German *Februar*, and the Dutch *Februari*; but is *Luty*.

There remains the possibility that he was a Czech, who spent his childhood inside the present borders of Czechoslovakia, but in the German part of either the previous Bohemia, Moravia, or Austrian Silesia. In this case, he has certainly learned to write German in school, but has had to take Czech as a second obligatory subject. Living in Czech family surroundings or among Czech friends, and speaking a good deal of Czech, he would have kept the habit of spelling *Februar* and *Familie* in the German way, and still writing some words which were less familiar to him in what seems to be phonetic spelling, but which would in fact be his native spelling.

If this argumentation be right, it would also answer for the spelling of *t* instead of *d* in

certain words, for instance, *instructet*, because no past participle in German is spelt with a *d*.

The next strangest spelling occurring in the text is *nite* for *night*. It would take a very unintelligent and uneducated American to spell in such a way; but since the handwriting as a whole is very fluent indeed, and bears evidence of a rather high intellect, and since it is out of the question that a man of such mental gifts as the writer of the anonymous letter evidently has would have scored so badly in school that he would in the same quick tempo (which means unhesitatingly and without any inner uncertainty) write down the word *nite*, we feel perfectly satisfied that the writer could not possibly be an American who had started his school career in an American school where the English language is used.

There remains of course the possibility that the writer has attended an American school where the Czech language is used, such as are found in surprisingly large numbers still in those parts of the Union where Czechs live in rather crowded quarters of big towns like Chicago.

But this probability is greatly reduced when we consider that German is so familiar to the writer that he cannot help falling back into German spelling, not only in such familiar words as *Februar* and *Familie*, but also in inconspicuous final endings of the past participle such as in *instructet*.

*Shape of Characters*<sup>1</sup>

When examining the letter we were struck by the strange forms of some characters :

*Children* (line 4) shows a *Ch* with a tendency to the German form of the *H*, which is of course a long letter with an upper and a lower projection.

*Give* (line 13). The *G* is very German indeed, and so is the *D* in *Dollars* (lines 8 and 9), and many other characters.

*Syntax*

Some passages show a purely German syntax :

*absolute no harm* (lines 5 and 6). When closely examining this passage we notice that there was a slight hesitation in the writer's mind when he wrote the word *no*, an uncertainty which is evident from the so-called 'perseveration' with which he wrote the *n* with three downstrokes instead of two, as if an *m* were meant.

*Grammar*

The writer's grammar also bears traces of German origin. He writes :

25 *cent* (line 15), instead of 25 *cents*.

2500 *Dollar* (line 26) instead of 2500 *Dollars*.

<sup>1</sup> See *Psychology of Handwriting*, pp. 113 and 114. Robert Saudek. London, 1925, George Allen & Unwin; or New York, W. Morrow & Co.

But in this connection we also notice that the writer must in some way or other be aware of his tendency to this particular misspelling, because in line 8, he spelt *Dollars* in the plural all right. We may assume that his attention has on some previous occasion been drawn to this mistake of his, but that he has not learnt his lesson thoroughly enough not to fall back into his native habit.

*an other* (lines 26 and 27), though there was space enough at the end of the line to continue without breaking up the word.

*if you dobled cross us* (line 32), instead of *double-crossed*. This is not typically German, but it shows once more that the English correct spelling was unfamiliar to the writer. But it really matters very little, since we have to consider the possibility, nay the probability, that any conspicuous mistakes in grammar or spelling are not really unintentional slips, but rather insertions well considered to create the impression that the writer is an uneducated person. It is quite a different thing with the inconspicuous slips which are hardly ever made deliberately and, even in those exceptional cases where they are applied, usually occur isolated only. Those really give away the writer's nationality or some other of his peculiarities.

*Preliminary Conclusions*

So far, we have satisfied ourselves, on the strength of the writer's peculiar spelling, shaping of characters, syntax and grammar, that we are dealing with somebody who as a child has learned German before he learned English; that he has, though attending a German school, at that time at least lived in Slavonic, and most probably Czech, environments; and that he has learned to write English only at a later time in his life.

*General Psychological Remarks*

The writing is comparatively quick, fluent, and shows good routine. It is a back-hand style, the downstrokes standing on an average at an angle of  $100^{\circ}$  to the horizontal writing line.

The writer is certainly an intelligent and versatile man; but the writing shows at the same time what we call great 'lability', which means a remarkable variation in a great number of typical features, such as writing pressure, size, size-proportion, the manner in which he connects the characters within the words, and the direction in which the lines run (in spite of the fact that the stationery was ruled). Besides, numerous characters are broken instead of running smoothly.

This assemblage of features shows a rather neurotic disposition, or what modern psychology terms a 'hysterical personality'. It also



shows, when graphologically analysed, marked adaptability.

Such personalities have always the chance, but also always run the risk, of being decisively influenced by good and bad examples encountered in their environments.

This man has evidently been misled by bad companionship and taken to crime ; but he is self-conscious, his handwriting does not show signs of boldness and energy and courage, nor of the urge to run risks.

He is a sly, calculating, scheming creature, who would work out a plan to be acted upon by others rather than act himself. He has a good power of combination, and also a marked capacity for surveying the big outlines of a scheme. Genetically he is of a neurotic disposition, very irritable indeed, and has little self-control. He would probably be the man to direct things from some secret spot in the background, but would be too much of a coward to take personal risks.<sup>1</sup>

. . . . .

These are about all the conclusions we can draw from the two pages of handwriting in the present state of our knowledge. Anything beyond this would be guess-work.

By themselves our statements would hardly

<sup>1</sup> See *Your Character from Your Handwriting*, p. 146. C. H. Brooks. London, 1929, G. Allen & Unwin ; or New York, W. Morrow & Co.



be sufficient to trace the culprit, but as additional information they might serve, and as a matter of fact actually have served, the police authorities to narrow down the number of those who could be connected with the blackmail in question.

## VI

### ANOTHER BLACKMAIL LETTER

**S**HORTLY after the anonymous letter described in the previous chapter had been delivered, neighbours of the addressee's also received two blackmail letters, in which in a similar way they were threatened with the kidnapping of members of their family unless they paid a sum of money. The first letter was meant for somebody living at 347 Washington Avenue, but was erroneously addressed to 434 Washington Avenue. The anonymous writer soon discovered his (or her) mistake, and wrote another letter to the correct address.

The question arose, whether this new blackmail was or was not connected in some way with the previous case.

Each of these two letters consists of two pages : they were delivered through the post, and therefore in each case an envelope is also at our disposal, though these for obvious reasons cannot be reproduced here. We are showing here one page only of each letter, in *Plate V* and *Plate VI*, and reproduce their text, with all the original slips and mistakes, as follows :

*Letter Number One*

1. To Mrs. J.—
2. Have your chauffeur
3. take 2 thousand dollars up
4. to Dublin Cafetarie at 9 o c tonight
5. wrap in brown paper. address to
6. Tony Levinsky. Dont think this is
7. just a joke. for we need
8. the dough. Fail to do as your
9. told will mean your daugheter
10. getting bumped off some day
11. & the U.S. army cant save her. It
12. will also mean we will ask
13. \$20,000 for your baby's safety. and we
14. will get both if it takes us 20 yrs
15. we always do
16. There is no use trying to catch
17. us as we just pick up men to
18. collect the money.
19. If it isnt worth 2 thousand to
20. you well thats your
21. funeral. We promise
22. you plenty of trouble if you
23. fail to fulfill our request also
24. you might be looking for anew
25. husband. Your house is well
26. watched so no wise tricks. We want
27. word from you tonight Dont go
28. by bad writing Its action that counts
29. We promise you peace if
30. you come across and keep quiet

31. like some of your neighbours. We know
32. you can afford it. Send only
33. \$100 and \$20 Bills
34. and no phony's.
35. Keep cops out of
36. this if you want
37. to live yourself
38. Have him go there
39. at 9 sharp
40. F.B.
41. You will hear from us later.
42. P S.
43. Charlie the
44. waiter
45. hasnt anything
46. to do with
47. this Just tell
48. him to give it
49. when asked for
50. or who ever is there

*Letter Number Two*

1. To Mrs. J——
2. We wrote you a letter
3. yesterday. But you may find it in
4. Mrs. J—— 434.
5. It wont be a very
6. happy Xmas for you unless you
7. come across with two thousand
8. dollars. Fail to do as we say
9. and your daughter is as good
10. as dead. Your neighbours done it

Put into with 2 thousand to  
 your well that's your  
 business. We promise  
 you plenty of trouble if you  
 fail to fulfill our request also  
 you might be looking for a new  
 husband. Your house is well  
 watched so no wise tricks. We want  
 word from you tonight don't go  
 by bad writing. No action that counts.  
 We promise your peace if  
 you come across and keep it  
 like some of your neighbors. We know  
 you can afford it. Send only  
 \$100 and \$20 bills  
 and no phony  
 keep backs out of  
 this if you want  
 to live yourself  
 have him go there  
 at 9 sharp  
 F.B.

P.S. Charles the  
 waiter  
 has  
 to ask  
 you just tell  
 him to give it  
 when asked for  
 or who ever is





11. so its up to you. Take your choice
12. We assure you safety if you come
13. across and refuse and we assure you
14. the loss of your two children should
15. it take us 10 yrs to get the baby
16. and the U S army cant save them.
17. Have your chauffeur deliver a letter
18. to Dublin Restaurant tonight. Telling
19. when we I can have it. Refuse and
20. we will kill your daughter. Then we
21. ask 20 thousand for the safety of your
22. baby. We know he your husband has the
23. dough.
24. Dont try any wise tricks. It wont
25. get you anywhere and keep the
26. cops out of it all the cant
27. catch is some date we pick up
28. to collect our dough.
29. Address your letter to
30. Tony Levinsky C/o Dublin Rest.
31. Tell him to give it to Charlie
32. the waiter. He will be relieved
33. of it later Your mam can beat
34. it. If you can pay tonight WRap in
35. brown paper. and do the same
36. as letter. 100 dollar Bills and \$20 bills  
only
37. and no phonys. Do this and you wont
38. regrett it. But otherwise we will
39. assure you plenty of excitement.
40. You will hear from us later
41. if we dont have it tonight. But

42. we better have word from you
43. or ~~we~~ we will — — —
44. Your house is well watched
45. So act as requested F.C.

Supplied with this material, we had to answer the following questions :

A. Have the two pages of the letter of which the second page is reproduced in *Plate V*, and to which we are going to refer as letter *Number One* in the following analysis, been written by the same person who has written the letter *Number Two*, of which we also reproduce the second page in *Plate VI* ?

B. Is the writer, or the writers, of letter *Number One* and of letter *Number Two* identical with the writer of the letter described in the previous chapter, and to which we are going to refer in the present report as the *Letter signed V* (*Plates III and IV*) ?

C. Were the letters written *ex abrupto*, or from dictation, or copied from some draft ?

D. Have the letters *Number One* and *Number Two*, and the *Letter signed V.*, been dictated or composed by one, two, or three persons ?

E. If they were written by more than one person, did the two blackmailers, or the one blackmailer and the other couple of blackmailers, work independently or on a common scheme ?

Dont try any wise tricks. It wont  
get you anywhere and keep the  
cops out of it all the cant  
catch is some date we pick up  
to collect our dough.

Address your letter to

Long Kennedy c/o Dublin Rest.  
Tell him to give it to Char.  
the waiter. He will be relieved  
of it later. Your man can beat  
it. If you can pay tonight <sup>What</sup> in  
brown paper and do the same  
as letter. 100 dollar Bills and <sup>20 bills</sup> only  
and no phony's. Do this and you wont  
regrett it. But otherwise we will  
assure you plenty of excitement.

You will hear from us later  
if we dont have it tonight. But  
we better have word from you  
or ~~well~~ we will.

Your house is well watched  
so act as requested F.C.



F. Can the writer of letters Number One and Number Two have dictated or composed the Letter signed V?

G. Can the writer of the Letter signed V have dictated or composed the letters Number One and Number Two?

H. What psychological conclusions can we safely draw from the three handwritings?

*Identity of the writers of letters Number One and Number Two.*

### *Conspicuous Features*

To the unskilled observer the letters Number One and Number Two may appear as written by two different persons, because Number One shows much less fluency, displays in fact a very poor routine of the writing movement, seems to be written with a clumsy hand and rather frequent tremor, is badly spaced and disorderly. Besides, it shows a different signature.

But a careful comparison of the two writings makes it certain that they have been written by the same person.

The reader will probably have no difficulty in noticing the following conspicuous similarities in letters Number One and Number Two:

The slips in spelling and grammar seem to be typical of an uneducated person. The writing pressure is evidently strong; the

writing is unsteady and variable in many respects ; it seems almost shaky as far as the slant is concerned, and is written in a large style.

Do these conspicuous similarities definitely counterbalance the conspicuous dissimilarities which we have noticed first ?

They certainly weaken the validity of our first impressions, but we cannot claim that they conclusively refute them. Our next step will therefore be the comparison of the inconspicuous features.

### *Inconspicuous Similarities*

1. The grasp of the pen was very similar, since throughout both documents the writing pressure shows thick downstrokes and thin upstrokes, but does not show any emphasis of pressure in the horizontal strokes.

2. In spite of the fact that at a first glance the spacial arrangement in Number One seems decidedly more irregular than in Number Two a more thorough examination reveals remarkable similarities in both cases. The left-hand margin is narrow and irregular, while the right-hand margin leaves open spaces in such a way that the lines sometimes do, and sometimes do not, run up to the edge of the paper.

The symbol of the dollar(\$) is written in the same clumsy way in both cases, and has in both cases been inserted later on, after the text had been written without it.



Again we ask ourselves whether these inconspicuous similarities carry sufficient weight definitely to refute our first impression about the non-identity of the two writers.

We are rather inclined to answer this question in the affirmative, particularly so when we consider that the more fluent writing was written on a ruled paper, whereas the clumsy writing was not.

Thirty years or so ago, the arguments presented thus far would have been regarded as sufficient, and they would as a matter of fact have hit the mark in the present case, which of course does not mean that they would prove correct in a different case.

The present technique in the comparison of two writings provides also for the comparison of so-called complexes of similarities.

### *Similarity Complexes*

1. In so-called long letters, such as *f*, and half-long letters, such as *p*, there are upper and lower projections, and it is typical of individuals that they either emphasize the upper projections only, or the lower projections only, or both; or curtail the one at the expense of the other. The more pronounced an individual habit proves to be in this connection, the more weight such similarities or dissimilarities carry.

Now in Letters Number One and Number Two we see that the upper projections are

stressed, and that at the same time the lower projections are curtailed.

This individual habit is shown in most characters, with a few definite exceptions. Here are some instances of these exceptions :

Number One, line 25, *Y* in the word ' *Your* ' ; line 30, *y* in ' *you* ' ;

Number Two, line 33, *Y* in ' *Your* ' ; line 34, *y* in ' *you* ' ; where the lower projections are somewhat emphasized.

Therefore we have a threefold complex of similarities, viz. the simultaneous occurrence of emphasized upper projections, curtailed lower projections, and the identity of the exceptions to this rule.

This argument, though very strong by itself, receives additional force from the fact that stressed upper projections are much rarer than stressed lower projections, the former occurring on an average in twenty per cent of all writings, and the latter in eighty per cent.

2. In Number One and Number Two, definite characters (*p*, *f*) show a tendency to the right, while other, also definite, characters (*y*, *g*) are written with a tendency to the left.

3. In Number One and Number Two, the *t*-bars and the final strokes at the ends of the words are written in a pointed style, which means with a decrease of pressure towards the end ; besides, the *t*-bars cross the *t*-stem

either high up, or in the middle of the stem, but never at a low point; and also rise upwards.

4. Number One and Number Two show, each in itself, some variation in the shape of the small character *y*.

5. Number One and Number Two show, each in itself, a variation in the form of the *r*, which is sometimes written as a *v*, never as an *r*, but is mostly curtailed when occurring at the end of a word.

6. Number One and Number Two show, each in itself, a great variation in the shape of inconspicuous letters such as *m*, *n*, *i*, *u*, and of their connections with the preceding and the following characters.

It is only now that we can definitely claim to know that Number One and Number Two have been written by the same person.

*Is the writer of letters Number One and Number Two identical with the writer of the Letter signed V?*

To answer this question, whether the writer of the two letters is identical with the writer of the Letter signed V, we have first to establish whether the two letters were written in the habitual hand of the black-mailer, or in a disguised hand.

The reason is evident. Suppose that we know that the two letters were written in an habitual hand, then it would follow that their

author could not possibly have written the first document, because it is absolutely impossible for any clumsy writer to simulate a fluent hand.

We have stated before that at a first glance letter Number One seems more clumsy than letter Number Two, and even the unskilled observer will notice that it was written more slowly. We have only partly accounted for this difference by mentioning the better quality of the paper and the fact that the one sheet was ruled and the other was not.

But we notice also that Number One was not written at a uniform speed, but that the middle part of it, as far as the words 'send only', has been written more quickly than the first few lines. Evidently the blackmailer first attempted to disguise his writing, but soon gave up the endeavour.

On the other hand, it is not conceivable that so clumsy a writer should be able to write at different times two hands which show so numerous similarities of conspicuous features, inconspicuous ones, and similarity complexes, particularly when we cannot assume that he had the first product of his hand photographed or otherwise mechanically reproduced before posting it, and that consequently he had kept no model to copy.

There is further the fact that letters Number One and Number Two show not only numerous corrections of letter-forms,

but also the same insertions of the dollar signs, and similar features which suggest that both letters have been written *ex abrupto* and not copied from some draft.

The different signatures point in the same direction. Both letters were meant to come from the same person, and the writer would hardly have made the mistake of putting two different signatures had not his memory failed him. When writing Number Two he no longer tried to disguise his hand.

For all these reasons we may claim to know that Number Two represents an undisguised hand, and Number One only a very clumsy and slight attempt at disguise.

Once we know so much we are certain that the Letter signed V could not possibly have been written by the writer of the two letters.

It would seem that we have made our task very easy by abstaining from the comparison of all the conspicuous and inconspicuous features and similarity complexes between the Letter signed V on the one hand, and the other two letters on the other.

But we are confronted here with one of those rare cases where the simplest of all arguments carries a greater weight, in fact forming conclusive evidence, than any number of similarities or dissimilarities possibly could.

In the whole science of handwriting, there are only two cases in which conclusions can

be drawn with absolute certainty, and we are confronted here with one of these two cases.<sup>1</sup>

It is a different question whether the writer of the Letter signed V could have written letters Number One and Number Two, since practically any mature and skilled writer may successfully simulate a clumsy hand. We can answer this question only by a comparison of the actual features of the writing.

But here also the argument holds good that even so skilful a writer as 'V' could not have twice consistently reproduced all those numerous features in two letters written on different occasions without actually copying them from some model. So strong is this argument that we can unhesitatingly abstain from comparing all conspicuous features and even most of the less conspicuous ones, and content ourselves with a comparison of the similarity complexes, which carry a greater weight than the two groups mentioned.

The term 'similarity complexes' stands as we have seen before for a number of simultaneously occurring similarities. The comparison of the two groups of letters shows :

(1) that the writer of the two letters (*Plates V and VI*) emphasized the upper projections of most characters while at the same time curtailing the lower ones. In contrast hereto,

<sup>1</sup> See pages 82 and 83.



'V' (*Plates III and IV*) always emphasizes his lower projections while at the same time frequently neglecting the upper ones;

(2) that the writer of the two letters wrote the characters *p* and *f* with a tendency to the right, but the characters *y* and *g* with a tendency to the left. In contrast hereto, 'V' writes *p* and *f* with a tendency to the left, whereas in *y* and *g* his tendency to the left is not so pronounced;

(3) that the writer of the two letters writes his *t*-bars and final strokes pointed towards the ends, and places his *t*-bars either too high, or anyhow not lower than the middle of the *t*-stem. In contrast hereto, 'V' has short *t*-bars which run parallel to the horizontal line, and cross the *t*-stem very low. His final strokes are short, do not rise, and often show those 'final adjustments' which occur when the pen rests for a moment on the paper and forms a dot at the end of the stroke;

(4) that the writer of the two letters applies various forms of *y*; further writes the *r* as if a *v* were meant except at the end of words, where he curtails the shape of the *r*. In contrast hereto, these particular forms do not occur in 'V's' writing;

(5) that the writer of the two letters uses variable shapes for inconspicuous characters such as *m*, *n*, *i*, and *u*, and also varies the way in which he connects them with the preceding and the following characters. In contrast

hereto, 'V' writes these inconspicuous letters and their connections in a rather uniform 'garland-like' style;

(6) that the writer of the two letters writes his *i*-dots in a very variable way, but anyhow either as actual dots or as short accents. In contrast hereto, 'V' frequently writes short horizontal bars which are sometimes slightly curved in a convex style. In doing so, he even applies a rather strong pressure.

We have now no doubt that 'V' has not written letters Number One and Number Two.

*The question has been asked whether he has not possibly composed or dictated letters Number One and Number Two.*

We have already established the fact that Number One and Number Two have not been copied from a text, but have been written *ex abrupto*, and that they have been corrected and supplemented later on, when the writer reread his first attempt.

Of course there is still the possibility that 'V', as the 'ruling spirit' of the whole scheme, might just have given his instructions, that the writer of the two letters has remembered only the big outlines but not the actual wording of the instructions, and has supplemented out of his own inventive mind those passages where his memory has failed him.

Against such a theory stand the following

facts: The writer of letter Number One started the scheme by making a mistake about the address. After having found out his blunder he had to write letter Number Two. Both letters show very poor imagination and a remarkable illiteracy, but they do not show bad memory, since they have whole passages in common.

But even granted that the writer of *Plates V* and *VI* might have written his letters on some general instructions from 'V', we cannot assume that two racketeers working on the same scheme would differ in that very technique of their job which must be permanently present to their minds. A racket believing in the untraceability of 5, 10, and 20 dollar bank-notes would not without any plausible reason change their technique and ask for denominations of 100 and 20 dollars a few days later.

Or, to mention another instance, it is unlikely that members of the same racket should state that they do not want forged bank-notes ('no phony's') in one letter, and 'no new ones' (which probably means new ones with consecutive numbers) in the other.

Further, the routine and technique of the racket should rather exclude such mistakes as the writing of 'I' instead of 'we'.

There is really too much of an unskilled improvisation of a dull mind in the letters Number One and Number Two to make it

probable that an experienced racket was at work. The gentleman is quite aware himself of his poor performance, and tries to make good for it by stressing 'Don't go by bad writing. Its action that counts'.

We may therefore almost safely say that 'V' has neither dictated nor composed, nor given the instructions for, letters Number One and Number Two.

From what we have seen thus far, it is evident that the writer of letters Number One and Number Two, about whose illiteracy we have no doubts, could not possibly have composed the letter signed V, which is in its style and diction on a much higher intellectual level.

*General Psychological Remarks on the  
two Writers*

1. The writer of the letter signed V is a very intelligent, skilful, and versatile man of a neurotic disposition, a schemer who is, however, lacking in the courage to carry out his schemes where a personal danger is involved. He is rather the type to pull the strings behind the scenes, to use others as the instruments for his plans, and to keep the main part of the booty, if there is such, for himself.

He is a man of foreign extraction, who as a child has learned to write in a German school, in some geographical border-district where

some Slavonic language (Czech or Polish) was spoken in his daily environments.

2. The writer of the letters Number One and Number Two may or may not be of foreign extraction ; but as a child he has learned to write in an American school. Whereas it is certain that the writer of the letter signed ' V ' is a man, it is only probable, but cannot be definitely established, that the writer of Number One and Number Two is also a man. His writing rather shows the psychological border-line between the two sexes.

He is not intelligent, in fact illiterate, clumsy, not practised in forgery, and hardly knows the tricks of such a game. He is of a strongly emotional nature, over-sexed, passionate, given to sudden tempers, and lacking in self-control. He is not a schemer, but a clumsy fool, far too violent methodically to plan his actions or to direct others on definite lines.

### *Conclusions.*

From our previous findings we may say :

#### *With Absolute Certainty.*

(a) The letters Number One and Number Two have been written by the same person.

(b) That person is not identical with the writer of the letter signed ' V '.

(c) The letters Number One and Number Two have not been written to dictation, nor have they been copied from a draft.



(d) The writer of letters Number One and Number Two has as a child learned to write in an American school, whereas the writer of the letter signed ' V ' has not.

*With great Probability, almost amounting to Practical Certainty.*

(a) The writer of the letter signed ' V ' is a man of foreign extraction, whereas the writer of the letters Number One and Number Two may, or may not, be a foreigner, and may be a woman.

(b) The two writers can hardly be members of the same organized racket, but have most probably worked independently, so that the whole scheme of letters Number One and Number Two may amount to a sort of plagiarism on an intellectually lower level.

(c) The writer of letters Number One and Number Two has hardly any experience in forgery and racketeering, so far as kidnapping blackmail is concerned. He is decidedly a novice in this respect.

*With some Degree of Probability which should not be completely discarded.*

(a) That the waiter Charlie is either the writer of the two letters Number One and Number Two, or of the letter signed ' V ', or the partner of the one criminal who double-crosses his associates, and has given the secret away to the other blackmailer to take the



chance in both schemes. Experience teaches that more often than not in anonymous letters the very name of the writer is mentioned in a way which in the opinion of the writer should clear him of suspicion.

The fact that in the P.S. of letter Number One it is expressly stated that ' Charlie has not anything to do with this ' makes him an object of suspicion, at least with a probability of sixty per cent, since this is the actual percentage claimed by criminological authorities as present in such cases.

## VII

### FORGERIES OF PARTS OF DOCUMENTS ONLY

SO far, we have dealt with forgeries of whole documents, or at least of lengthy passages of writing ; but very numerous are the cases where only very small parts of documents have been tampered with, and where it is not so much a question of an analysis of the writing movement, or of the general writing habits or idiosyncrasies of the writer, but rather a matter of a purely technical nature.

From the legal point of view, there is of course no difference between the forgery of a lengthy writing and one where a single stroke has altered the whole meaning of a disputed document ; but speaking technically we call the fraudulent tampering with very small parts of a writing ' local forgeries '. In such cases, the main substance of a written document is not disputed.

The wording of an IOU may admittedly have been written by the defendant, and the signature may be the admittedly genuine signature of the plaintiff ; and the forgery in the legal sense of the term may consist only in the fact that the text has been inserted on

the blank space above the signature, which might have been given for quite a different purpose.

*Plate VII a* shows such a document. It was disputed in a spectacular trial abroad, a case which appeared for months on the front pages of the newspapers in Central Europe, partly because very big sums were involved, and partly because the two litigants have been in the limelight of public attention for many years.

About eighteen experts for the defence and for the prosecution appeared in the witness-box. The claim of the prosecution was that the signature had been given on a blank sheet to the defendant at a time when the two parties were on very friendly and in fact intimate terms, and unreservedly trusted each other.

Now, in a case like this, where the only issue is whether the text of the commitment had been written before or after the signature was put on paper, and where there is no dispute over the genuineness of either writing, the question can be answered if at some spot in the document the two writings overlap each other in such a way that there are so-called 'cross-lines'. Where no cross-lines are present, there is little chance of a correct answer to the question at issue.

But where such cross-lines do occur, we are in some cases able accurately to tell which

of the two lines lies above (and must therefore necessarily have been written later), and which lies underneath (and has therefore been written previously).

It all depends on whether the one line crossed the other at a time when the ink of the previously written stroke was still wet on the paper, or whether the crossing actually took place over the stroke when the ink was already dry.

*Plate VII b* shows an enlargement of such cross-lines, which were produced while the ink was still wet. In this way we see that the crossing strokes are about equally dark, and that in the actual angle formed by the two crossing downstrokes the ink was drawn out, and partly filled the area between the arms of the angle.

This would not have happened had the ink of one of the cross-strokes been dry at the time when the other cross-stroke passed over it; but by the quick movement of the downstroke of the loop, the fluid ink was carried away as we see in the picture.

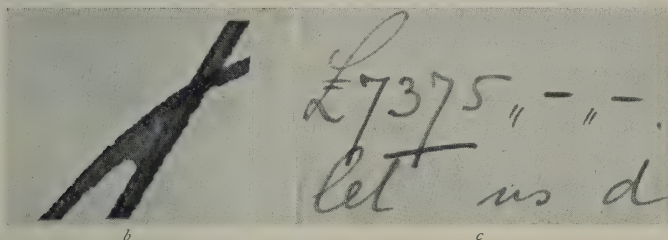
Should the question arise which of the two strokes had been written first, we should in such a case be at a loss to answer it. It is probable that the straight downstroke was written first, because it is part of the upper writing; but it is conceivable that the sequence was the other way round.

The only thing we can say with certainty is

Ich bestätige hiermit am 6. Nov. 1918.  
 Mk. 400.000 (vierhunderttausend) für meinen  
 in conto derassen Erbsen für künftigen Lieferant  
 zu haben. Ich werde diesen Betrag auf zehn (10) Millionen als  
 eigenem Erbsen und 1/2 zu Eigentum über  
 6. November 1918.

a

A DISPUTED DOCUMENT

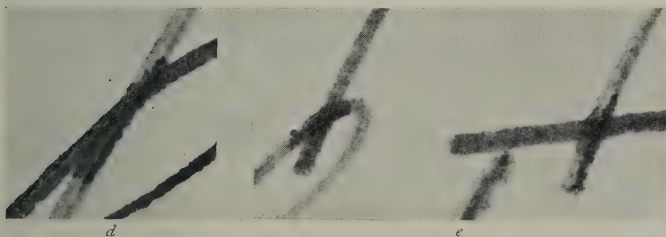


b

c

(b) ENLARGED PHOTOGRAPH OF TWO CROSS-LINES WRITTEN WHILE THE INK WAS STILL WET

(c) CROSS-LINES IN AN ALLEGEDLY FORGED CHEQUE



d

e

(d) ENLARGED CROSS-LINES. THE LOOP WAS WRITTEN AFTER THE INK OF THE DOWNSTROKE WAS DRY

(e) ENLARGEMENT OF A PART OF c





that between the tracing of the one stroke and the other, there could not have elapsed sufficient time to allow the ink of the first stroke to dry on the paper.

*Plate VII c* shows part of a disputed document. The plaintiff claims that the figure mentioned therein was originally £375, and that the first 7, which raised the amount to £7,375, was fraudulently added later on.

It is clear that neither knowledge of the writing movement nor the study of the psychology of handwriting can help us here to answer the question whether the plaintiff or the defendant is right. We notice that the writing overlaps in such a way that the word *let* is twice crossed by strokes which form part of the line above; viz. the loop of the *l* is crossed by the main downstroke of the disputed figure 7 and the *t*-bar is either crossed by the main downstroke of the other 7, or possibly itself crosses this 7.

Here photography comes in. Before we start our examination we have the spots where the two crossings occur photographed to a larger scale.

*Plate VII e* is the result. Since the plaintiff claims that the figure on the document was originally £375, we may expect that this figure was in the normal course of the writing written before the word of the next line which lies beneath it, and that therefore the

*t*-bar would be above the downstroke of the second 7.

We have seen before that, when a wet stroke is crossed by another ink-stroke, there is no marked difference in the shadowing at the intersection.

What do we now actually notice here? We see the dark horizontal *t*-bar crossing the distinctly lighter downstroke, but darkening the stroke at the spot where the two lines crossed each other.

We see at the same time that slightly above and slightly below the crossing, the downstroke of the 7 has been darkened as well, which means that some bigger quantity of ink has remained there on the paper. From this we conclude that the second 7 and the *t*-bar cannot have been written immediately after one another, i.e. while the ink was still wet.

The same conclusion holds good for the other instance of cross-lines; but there it was not the downstroke of the 7 which has been darkened in this way, but quite on the contrary, the downstroke of the loop of the *l* which shows the same sudden darkening shortly before and shortly after the crossing.

From this we conclude that the two 7's could not possibly have been written in similar circumstances (provided of course that the *t*-bar has been written at the same time

as the *t*-stem), because the ink in the cross-lines behaved differently in each case.

The reader, who does not know that the circumstances in which the cross-line behaves either one way or the other have been definitely established, might like to start an experiment of his own to check the correctness of those rules which the experts hold to be reliable.

The result of such an experiment is illustrated in *Plate VII d*. There the straight downstroke was written first, allowed to dry, and then it has been crossed by the loop of a capital *L*. We see that at the intersection, slightly above and slightly below, the straight downstroke has been darkened.

The same phenomenon is shown also in *Plate VII e* (which is of course part of an enlargement of the disputed document), on the right-hand side, where the straight downstroke of the second 7 has been crossed by the *t*-bar.

From this we have learned that the second 7 has been written before the word *let*, and furthermore, that it was already dry on the paper when the actual crossing occurred.

Now, this is precisely what the plaintiff claims to be the case.

It remains for us to find out what has happened to the first 7. There the enlargement shows that the local darkening slightly to the right and slightly to the left of the

intersection does not occur in the short vertical stroke, but in the horizontal part of the loop.

From this we learn that the first 7 was written later than the word *let*, and also at a time when the word *let* in the line below had already dried on the paper. This again confirms the correctness of the plaintiff's claim, and we now know that the figure in this IOU was indeed £375 at first, and that the 7 which raised the amount to £7,375 has been added later on.

Further than this the expert must not go. He cannot claim to know that this addition to the original document was made for fraudulent purposes. It is quite conceivable that the parties might have agreed upon this change, that the alteration was quite legitimate, and that both consented to it. It must be left to the judge to decide this question upon some further circumstantial evidence.

How erroneous it may be to regard such 'tampering' with documents as definitely fraudulent is shown in the case of *Plate VII a*. The whole document, from which in our picture, for obvious reasons, the names occurring in the text and the main part of the signature have been cut out, measures in the original 118 mm.  $\times$  82 mm., which makes it 9,676 sq. mm.

The surface of the document as shown in numerous photographs in court appeared

perfectly smooth, with the sole exception of one small spot of the size of 1 sq. mm., which seemed to have been tampered with. This spot is at the very beginning of the last word of the text *überweisen*. There the long and bold upstroke which formed part of the signature overlapped the first downstroke of the first character *ü* ; but the intersection of the two lines does not appear in the photograph, and instead of it we see a small blank of 1 sq. mm.

Had this intersection appeared in the photograph, the enlargement would most probably have shown whether the signature was written later than the text above it, or previous to the text. But, since the intersection had for some reason disappeared, the experts could not answer this question, which was the only one raised in the court in connection with this document.

For some reason the original of the document was not available. It had disappeared in some mysterious and rather romantic way and the court and the experts had to base their opinion exclusively on photographs which had been made before the original disappeared.

The question whether the text was written with a different ink from that of the signature could not be raised, nor could a photograph with ultra-violet rays be made to show whether some stroke invisible to the human eye would not appear in the photograph and



show what there was originally on the paper.

In these circumstances, the experts had to content themselves with the statement that the question could not be answered. It was not for the experts to suggest that since only 1 sq. mm. of the surface has been tampered with, and since that little spot was the only one which mattered out of 9,676 sq. mm. : this fact rather suggests that the defect could hardly be incidental, but most probably has been caused deliberately.

The court had to examine this aspect of the issue on the strength of some additional circumstantial evidence which was outside the scope of the expert's actual task. The court has, as a matter of fact, examined this question and answered it in the negative ; the judges satisfied themselves about the genuineness of the document and gave their verdict accordingly.

Sometimes it happens that a disputed document has been folded, and that some part of the writing runs across the folds. It is clear that a handwriting produced on smooth paper shows sharper outlines of the strokes and a more fluent movement than a writing of which the movement was impeded by a rough fold.

If now in the same line there occur fluent strokes in one part and unsharp, blurred strokes in another, and if this difference is



consistently shown in those spots where the strokes cross the fold, it is plain that the two parts have been written at different times, the one before and the other after the paper has been folded. The reason is that the structure of the stroke, once it had dried, does not change by a later folding. A microscopic examination of enlarged photographs shows the difference very plainly indeed.

In normal cases the court is of course supplied with the original document. It was quite exceptional that in the case of *Plate VII a* a decision had to be made on a photographic enlargement only.

Where in such a document there are traces of erasures, we have to discriminate first whether part of the writing has been destroyed by mechanical means such as india-rubber or knife, or by chemical means; and again, where mechanical means have been applied, there is a great technical difference between their effects on pencil-writing on the one hand, and ink-writing on the other.

It has been established that pencil-writing can never be completely removed by india-rubber; at least, so all experts have declared when this question was raised in court. A microscopic examination will always show that some minute particules of graphite are deposited in the fibre of the paper. Sometimes these little particles of graphite will be some inches away from the actual spot of erasure,

because the movement of the rubber has carried them so far ; but somewhere in the fibre of the paper some particle of graphite will be hidden. It must be well understood that though the absence of such particles of graphite proves that no erasure has taken place, the presence of graphite by itself does not prove that the document has been tampered with, since an incidental pencil mark may be due to some other reason.

It is also certain that a microscopic examination of the surface of the paper will definitely show whether the paper has been rubbed with india-rubber or not.

The latter holds good also, and in fact in a higher degree, with erased ink-writing ; but with ink-writing we have other means of establishing whether actual writing has been removed.

Sometimes (with clumsy forgers), the traces of the erasure are still noticeable to the naked eye. But where no such traces seem to be present, and the genuineness of the document is suspected, an examination with the microscope, with first the light behind the paper and then reflected at various angles, will show whether the surface of the paper has been injured.

After the expert has satisfied himself about this state of things, he will of course make an enlarged photograph to demonstrate the fact to the court.

This by itself does not prove a forgery, but only strengthens the suspicion.

The main task is to make the removed writing visible again. Photographs made with ultra-violet rays show in most cases, though hazy and vague, still legible outlines of the removed writing. The reason for this remarkable fact is that the ink does not remain on the surface of the paper only, but filters through to the lower strata of the paper, where it can be reached by ultra-violet rays which then record the fact on the photographic plate. The shorter waves within the range of the ultra-violet rays are, according to some authorities, particularly effective.

The same method is applied also where ink-writing has been removed by chemical means ; but in this case also the so-called fuming processes may be applied, by which the bleaching produced by chemical ingredients can be undone, so to speak, and the bleached parts re-coloured and in this way made visible.

Frequent are of course the cases where some new writing has been inserted in those parts where the original writing has been removed. It is not surprising that such writing will never show the sharp outlines and edges which are typical of writing produced on smooth paper.

Such inserted passages form of course only a part of the whole document, so that a comparison of the passages written on the

roughened surface with those written on the smooth surface should be made. The ink might be different, and so also the nib used. Besides, the age of the two inks may also differ.

Enlargements of the two kinds of writing may show that the one pen was more pointed than the other, or more or less resilient, and the different shadowing of the two inks may be emphasized by making photographs with different light-filters which absorb certain colours and allow others to pass through.

Here also ultra-violet rays make the difference of colour in the two inks more marked, because of a different fluorescence.

In the case of Dreyfus, we have seen how it can be established by measurements whether parts of the writing have been actually traced or not. There are of course two kinds of tracing, either the primitive way in which a writing is pounced with pencil and the pencil-writing then covered with ink, and where there also remain impressions on the paper; or a tracing which shows no such impressions, as was alleged to be present in the case of Dreyfus.

Both tracings can be easily discovered. Even very slight impressions will show in enlarged photographs made with the light reflected at different angles.

We know already that pencil-writing can never be completely removed, and can there-

fore assume that this method of tracing will at once be discovered should the forger not succeed in completely covering the pencil strokes with ink.

Where no such traces are visible, one has to remove the ink at one or two spots with a chemical solvent which, while destroying the ink, leaves intact the graphite beneath.

Should there be any doubt whether some hazy, vague, and hardly visible line, revealed in such a way, is, or is not, a previous pencil-writing, the ultra-violet rays will amplify the contrast, since graphite shows a markedly stronger fluorescence than ink.

All these 'local forgeries' are somewhat outside the scope of the present book, which was more concerned with an analysis of the writing movement, and the psychology of handwriting as applied to criminal cases.

This is the reason why here only a general survey of those recently improved methods of investigation is given, in which chemistry and advanced photography play the leading part.

## VIII

### CONCLUSIONS

**W**E have set out to show how far the criticism uttered by the public and authorities against experts on handwriting is, or is not, founded.

I hope I have succeeded in showing that where 'local forgeries' are concerned our science is at least as far advanced as any scientific discipline whose representatives are called upon as expert witnesses in the courts.

In these cases handwriting experts can often enough make accurate statements, or at least claim so overwhelming a probability for the correctness of their reports that it really amounts to practical certainty.

On the other hand, we have to admit that, where a whole lengthy text or main parts of written documents are concerned, the experts (with two exceptions: viz. actual pouncing, and the impossibility for a clumsy writer to write a skilful hand) have to rely on a number of circumstantial evidences only; and that accordingly they can claim the correctness of their judgment only with that degree of probability which is supported by the weight and the frequency of such evidence.



Inconspicuous features and unconscious habits and idiosyncrasies will always carry a much greater weight than conspicuous features. The unskilled observer (and most judges and certainly the jury are to be counted among them) will for this reason be inclined to believe in the evidence of those very features which mean little to the expert, and will be bound to distrust the arguments of the experts because the uninitiated are seldom able to notice those inconspicuous features which really do matter in the proof of identity.

On the other hand, those 'similarity complexes', which are really almost conclusive one way or the other, will greatly appeal to the refined judgment, logic, and common sense of the learned jurist.

In the present state of our science, there are two main difficulties :

(1) that we have no definite standards by which to establish whether a disputed writing which shows great similarity to a genuine writing, but is lacking in fluency and rhythm, is to be regarded as a skilful freehand copy, or as a genuine writing produced under some incidental acute handicaps.

(2) that there are, though very rare, cases of forgers whose skill is greater than that of the experts. They may produce a number of writings of quite different styles, each of

which is consistently carried out in all its details.

A skilful forger with scientific training stands a good chance of beating the expert on these two points.

## INDEX

Adjustments, final, 115  
 Ames, 31  
 Anonymous letters, 77-121  
 'Aurore,' 46

Babington conspiracy, 8  
 Backhand, 80, 99  
 Belhomme, 36, 47  
 Bertillon, 22, 23-29, 30, 34,  
     37, 48, 54, 82  
 Binet, A., 33  
 'Bordereau,' 17, 19, 20, 21,  
     23, 24, 26, 29, 31, 32, 33,  
     34, 36, 37, 40, 42, 43, 44,  
     46, 47, 48, 49, 50, 53, 56,  
     57, 71, 82  
 Bothwell, 8, 9  
 Bridier, J., 31  
 Brooks, C. H., 100

Cabinet, Noir, 7, 9, 15  
 Camden, 8  
 Carberry Hills, 9  
 Carvalho, 31  
 Casanova, 9  
 Cecil, 8  
 Centrifugal movements, 42  
 Character and Personality,  
     62  
 Charavay, 22, 29, 30, 54  
 Chemical solvent, 131, 133,  
     135  
 Citadelle des rébus graph-  
     iques, 27, 28, 48

Clemenceau, 46, 47, 48, 51  
 Consistency, 83, 85, 138  
 Conspicuous features, 3, 37,  
     38, 40, 43, 45, 46, 62, 67,  
     79, 80, 88, 89, 98, 107, 108,  
     112, 113, 114, 137  
 Corrections, 73, 75, 112, 116  
 Couard, 36, 47, 48  
 Covering strokes, 43, 44  
 Craigmiller, 8  
 Cramp, 73  
 Crépieux-Jamin, J., 31, 33  
 Cross-lines, 8, 123, 124, 126,  
     127  
 Cuignet, 52

Da Silva, 8  
 Devil's Island, 35  
 Discrete motor impulses, 50  
 Disguised Handwriting, 24,  
     25, 50, 80, 83, 85, 86, 111,  
     112, 113  
 Disturbing influences, 72, 73  
 Dreyfus, 9, 14, 15-55, 56, 70,  
     71, 82

Ecole de Chartes, 49  
 Elizabeth of England, 8, 9  
 Engraving, 18, 31, 32  
 Erasures, 131, 132  
 Esterhazy, 32, 33, 34, 35, 36,  
     37, 39, 40, 42, 43, 44, 45,  
     46, 47, 49, 53, 56, 57, 70,  
     71

- Experimental Graphology,  
50, 69, 85  
Experiments with Hand-  
writing, 38, 67
- Finger-prints, 68  
Fluorescence, 134, 135  
Folded paper, 130, 131  
Foot-writing, 75  
Fuming processes, 133
- Garland-like style, 116  
Genetic influences, 61  
Giry, 50  
Gobert, 22  
Gordon, Lord, 8  
Graphite, 132, 135  
Graph-paper, 24, 25, 26  
Grasp of the pen, 39, 40, 73,  
81, 108  
Gray Birch, de, 31  
Gurrin, T. H., 31
- Havet, Louis, 80  
Henry, Major, 51, 53  
Héricourt, 49  
Holt Schooling, M. J., 31  
Hurst, 31  
Hysteric personalities, 86,  
99
- Identity, proof of, 68, 82,  
107-116, 137  
Inconsistency, 58, 83  
Inconspicuous features, 3,  
39, 40, 42, 44, 45, 46, 67,  
70, 79, 80, 83, 88, 89, 98,  
108, 109, 111, 112, 113,  
115, 116, 137
- India-rubber, 131, 132  
Inherited influences, 61  
Intuition, 37
- Jaurès, 52  
Justinian, 3, 5
- Kirkcaldy, 9
- Lability, 'labile,' 70, 71,  
99  
Labori, Maître 47, 48  
Le Figaro, 52  
Lefthand writing, 80  
Le Matin, 18, 31, 32, 33, 53  
Lethington, 8, 9  
Letter-impulse, 73, 81  
Light-filters, 134  
Line block, 18  
Local forgeries, 122-135,  
136  
Lower projections, 109, 110,  
114, 115
- Maitland of Lethington, 8  
Marneffe, de, 31  
Mary Stuart, 8, 9  
Mary Tudor, 9  
Mechanical factors, 3, 131  
Mercier, General, 29, 30,  
31  
Meyer, Paul, 49  
Microscopic examination, 88,  
131, 132  
Mirror-writing, 18, 88  
Molinier, Auguste, 49  
Molinier, Emil, 49  
Moray, 8, 9  
Moriaud, P., 31, 50

- Mouth-writing, 75  
 Muscular tone, 69
- Nationality of the writer,  
   69, 98  
 Natural writing, 66, 80, 82  
 'Nature,' 61  
 Neurotic constitution (dis-  
   position), 70, 79, 99, 100,  
   118  
 'Nurture,' 61
- Obsession, 87  
 Omission of characters, 43
- Paranoia, 86, 87  
 Paris, 8  
 Pathological Tremor, 50  
 Pelletier, 22, 29  
 Pellieux, General de, 51  
 Physical factors, 3, 72, 73, 75  
 Picquart, 33, 34, 35, 36  
 Pouncing, 57, 134, 136  
 Preyer, W., 31  
 Primary signs of forgery, 73  
 Psychology of Handwriting,  
   97, 125, 135  
 Psychopaths, 86, 87
- Rackets, 90, 117, 118, 120  
 Retracing, 73, 75, 81, 82  
 Rheumatic troubles, 73, 74,  
   75  
 Richelieu, 1, 8, 9  
 Rougemont, de, 31
- School copy, 69  
 Schwarzkoppen, von, 22, 34  
 Sentence-impulse, 73, 81  
 Sexual perversion, 70, 71  
 'Similarity complexes,' 109  
   - 111, 112, 113, 114,  
   137  
 Size-ratio (proportion), 44,  
   45, 99  
 Spelling, 93-96, 99, 107  
 Steinthal, W., 35  
 Strata of paper, 133  
 Stratum, social, 70, 78  
 Stroke-impulse, 73, 81  
 Swinging movements, 58
- Tendency to the left (right),  
   110, 115  
 Teyssonières, 22, 30, 31  
 Transparent graph, 25  
 Transparent paper, 18, 24  
 Tremor, 50, 75, 107  
 Turner, Sir George, 8  
 Twins, fraternal, 62  
 Twins, identical, 58, 59, 60,  
   61, 62, 63, 64, 68
- Ultra-violet rays, 129, 133,  
   134, 135  
 Uncertain movements, 49,  
   71  
 Upper projections, 44, 109,  
   110, 114, 115
- Varinard, 36, 47  
 Visual memory, 69
- Walshingham, 8  
 Width, 42

Word-impulse, 73, 81

Writing material (utensils),  
3, 72, 73, 81, 87

Writing with mutilated  
hands, 76

York Conference, 8

Your Character from your  
Handwriting, 100

Zola, E., 17, 46, 47, 51, 52





Made and Printed in Great Britain at  
*The Mayflower Press, Plymouth*  
William Brendon & Son, Ltd.

METHUEN'S  
GENERAL LITERATURE



# A SELECTION OF MESSRS. METHUEN'S PUBLICATIONS

This Catalogue contains only a selection of the more important books published by Messrs. Methuen. A complete catalogue of their publications may be obtained on application.

## ABRAHAM (G. D.)

MODERN MOUNTAINEERING

Illustrated. 7s. 6d. net.

## ARMSTRONG (Anthony) ('A. A.' of Punch)

WARRIORS AT EASE

WARRIORS STILL AT EASE

SELECTED WARRIORS

PERCIVAL AND I

PERCIVAL AT PLAY

APPLE AND PERCIVAL

ME AND FRANCES

HOW TO DO IT

BRITISHER ON BROADWAY

WHILE YOU WAIT

Each 3s. 6d. net.

LIVESTOCK IN BARRACKS

Illustrated by E. H. SHEPARD.

6s. net.

YESTERDAILIES. Illustrated. 5s. net.

EASY WARRIORS

Illustrated by G. L. STAMPA.

5s. net.

## BALFOUR (Sir Graham)

THE LIFE OF ROBERT LOUIS STEVENSON

10s. 6d. net.

Also, 3s. 6d. net.

## BARKER (Ernest)

NATIONAL CHARACTER

10s. 6d. net.

GREEK POLITICAL THEORY

14s. net.

CHURCH, STATE AND STUDY

10s. 6d. net.

## BELLOC (Hilaire)

PARIS

8s. 6d. net.

THE PYRENEES

8s. 6d. net.

## BELLOC (Hilaire)—continued

MARIE ANTOINETTE 18s. net.

A HISTORY OF ENGLAND

In 7 Vols. Vols. I, II, III and IV

Each 15s. net.

## BIRMINGHAM (George A.)

A WAYFARER IN HUNGARY

Illustrated. 8s. 6d. net.

SPILLIKINS: ESSAYS 3s. 6d. net.

SHIPS AND SEALING-WAX: ESSAYS  
3s. 6d. net.

## CASTLEROSSE (Viscount)

VALENTINE'S DAYS

Illustrated. 10s. 6d. net.

## CHALMERS (Patrick R.)

KENNETH GRAHAME: A MEMOIR

Illustrated. 10s. 6d. net.

## CHARLTON (Moyra)

PATCH: THE STORY OF A MONGREL

Illustrated by G. D. ARMOUR.

5s. net.

THE MIDNIGHT STEEPLECHASE

Illustrated by GILBERT HOLIDAY.

5s. net.

## CHESTERTON (G. K.)

COLLECTED POEMS 7s. 6d. net.

ALL I SURVEY 6s. net.

THE BALLAD OF THE WHITE HORSE

3s. 6d. net.

Also illustrated by ROBERT

AUSTIN. 12s. 6d. net.

ALL IS GRIST

CHARLES DICKENS

COME TO THINK OF IT . . .

Each 3s. 6d. net.

**CHESTERTON (G. K.)—continued**

GENERALLY SPEAKING  
ALL THINGS CONSIDERED  
TREMENDOUS TRIFLES  
FANCIES VERSUS FADS  
ALARMS AND DISCURSIONS  
A MISCELLANY OF MEN  
THE USES OF DIVERSITY  
THE OUTLINE OF SANITY  
THE FLYING INN

*Each 3s. 6d. net.*

WINE, WATER AND SONG 1s. 6d. net.

**CURLE (J. H.)**

THE SHADOW-SHOW 6s. net.  
Also, 3s. 6d. net.  
THIS WORLD OF OURS 6s. net.  
TO-DAY AND TO-MORROW 6s. net.  
THIS WORLD FIRST 6s. net.

**DEXTER (Walter)**

DAYS IN DICKENSLAND  
Illustrated. 7s. 6d. net.

**DUGDALE (E. T. S.)**

GERMAN DIPLOMATIC DOCUMENTS,  
1871-1914  
In 4 vols. Vol. I, 1871-90.  
Vol. II, 1891-8. Vol. III, 1898-  
1910. Vol. IV, 1911-14.  
*Each £1 1s. net.*

**EDWARDES (Tickner)**

THE LORE OF THE HONEY-BEE  
Illustrated. 7s. 6d. and 3s. 6d. net.  
BEE-KEEPING FOR ALL  
Illustrated. 3s. 6d. net.  
THE BEE-MASTER OF WARRILOW  
Illustrated. 7s. 6d. net.  
BEE-KEEPING DO'S AND DON'TS  
2s. 6d. net.  
LIFT-LUCK ON SOUTHERN ROADS  
5s. net.

**EINSTEIN (Albert)**

RELATIVITY: THE SPECIAL AND  
GENERAL THEORY 5s. net.  
SIDELIGHTS ON RELATIVITY  
3s. 6d. net.  
THE MEANING OF RELATIVITY  
5s. net.  
THE BROWNIAN MOVEMENT  
5s. net.

**EISLER (Robert)**

THE MESSIAH JESUS AND JOHN THE  
BAPTIST  
Illustrated. £2 2s. net.

**EVANS (B. Ifor)**

ENGLISH POETRY IN THE LATER  
NINETEENTH CENTURY  
10s. 6d. net.

**EWING (Sir Alfred), President of  
the British Association, 1932**  
AN ENGINEER'S OUTLOOK

8s. 6d. net.

**FIELD (G. C.)**

MORAL THEORY 6s. net.  
PLATO AND HIS CONTEMPORARIES  
12s. 6d. net.  
PREJUDICE AND IMPARTIALITY  
2s. 6d. net.

**FINER (H.)**

THE THEORY AND PRACTICE OF  
MODERN GOVERNMENT 2 vols.  
£2 2s. net.  
ENGLISH LOCAL GOVERNMENT  
£1 1s. net.

**FITZGERALD (Edward)**

A FITZGERALD MEDLEY. Edited  
by CHARLES GANZ. 15s. net.

**FYLEMAN (Rose)**

FAIRIES AND CHIMNEYS  
THE FAIRY GREEN  
THE FAIRY FLUTE *Each 2s. net.*  
THE RAINBOW CAT  
EIGHT LITTLE PLAYS FOR CHILDREN  
FORTY GOOD-NIGHT TALES  
FORTY GOOD-MORNING TALES  
SEVEN LITTLE PLAYS FOR CHILDREN  
TWENTY TEA-TIME TALES  
*Each 3s. 6d. net.*

**THE EASTER HARE**

Illustrated. 3s. 6d. net.

FIFTY-ONE NEW NURSERY RHYMES  
Illustrated by DOROTHY BUR-  
ROUGHES. 6s. net.

THE STRANGE ADVENTURES OF  
CAPTAIN MARWHOPPLE  
Illustrated. 3s. 6d. net.

**GAVIN (C. I.)**

LOUIS PHILIPPE, KING OF THE  
FRENCH 7s. 6d. net.

**GIBBON (Edward)**

THE DECLINE AND FALL OF THE  
ROMAN EMPIRE  
With Notes, Appendixes and Maps,  
by J. B. BURY. Illustrated. 7 vols.  
15s. net each volume. Also, un-  
illustrated, 7s. 6d. net each volume.

**GLOVER (T. R.)**

VIRGIL  
THE CONFLICT OF RELIGIONS IN  
THE EARLY ROMAN EMPIRE  
POETS AND PURITANS  
*Each 10s. 6d. net.*  
FROM PERICLES TO PHILIP  
12s. 6d. net.

**GRAHAME (Kenneth)**

THE WIND IN THE WILLOWS

7s. 6d. net and 5s. net.

Also illustrated by ERNEST H.

SHEPARD. Cloth, 7s. 6d. net.

Green Leather, 12s. 6d. net.

Pocket Edition, unillustrated.

Cloth, 3s. 6d. net.

Green Morocco, 7s. 6d. net.

THE KENNETH GRAHAME BOOK

('The Wind in the Willows',

'Dream Days' and 'The Golden Age' in one volume).

7s. 6d. net.

See also Milne (A. A.)

**HADFIELD (J. A.)**

PSYCHOLOGY AND MORALS 6s. net.

**HALL (H. R.)**

THE ANCIENT HISTORY OF THE

NEAR EAST £1 1s. net.

THE CIVILIZATION OF GREECE IN

THE BRONZE AGE £1 10s. net.

**HEATON (Rose Henniker)**

THE PERFECT HOSTESS

Decorated by A. E. TAYLOR.

7s. 6d. net. Gift Edition, £1 1s. net.

THE PERFECT SCHOOLGIRL

3s. 6d. net.

**HERBERT (A. P.)**

HELEN 2s. 6d. net.

TANTIVY TOWERS and DERBY DAY

in one volume. Illustrated by

Lady VIOLET BARING. 5s. net.

Each, separately, unillustrated

2s. 6d. net.

HONEYBUBBLE &amp; Co. 3s. 6d. net.

MISLEADING CASES IN THE COMMON

LAW. 5s. net.

MORE MISLEADING CASES 5s. net.

STILL MORE MISLEADING CASES.

5s. net.

THE WHEREFORE AND THE WHY

'TINKER, TAILOR . . .'

Each, Illustrated by GEORGE

MORROW. 2s. 6d. net.

THE SECRET BATTLE 3s. 6d. net.

THE HOUSE BY THE RIVER

3s. 6d. net.

'NO BOATS ON THE RIVER'

Illustrated. 5s. net.

**HOLDSWORTH (Sir W. S.)**

A HISTORY OF ENGLISH LAW

Nine Volumes. £1 5s. net each.

Index Volume by EDWARD POTTON.

£1 1s. net.

**HUDSON (W. H.)**

A SHEPHERD'S LIFE

Illustrated. 10s. 6d. net.

Also unillustrated. 3s. 6d. net.

**HUTTON (Edward)**

CITIES OF SICILY

Illustrated. 10s. 6d. net.

MILAN AND LOMBARDY

THE CITIES OF ROMAGNA AND THE MARCHES

SIENA AND SOUTHERN TUSCANY

NAPLES AND SOUTHERN ITALY

Illustrated. Each 8s. 6d. net.

A WAYFARER IN UNKNOWN TUSCANY

THE CITIES OF SPAIN

THE CITIES OF UMBRIA

COUNTRY WALKS ABOUT FLORENCE ROME

FLORENCE AND NORTHERN TUSCANY VENICE AND VENETIA

Illustrated. Each 7s. 6d. net.

**HYAMSON (Albert M.)**

PALESTINE OLD AND NEW

Illustrated. 7s. 6d. net.

A HISTORY OF THE JEWS IN ENGLAND

Illustrated. 10s. 6d. net.

**INGE (W. R.), D.D., Dean of St. Paul's**

CHRISTIAN MYSTICISM. With a New Preface. 7s. 6d. net.

**JOHNS (Rowland)**

DOGS YOU'D LIKE TO MEET

LET DOGS DELIGHT

ALL SORTS OF DOGS

LET'S TALK OF DOGS

PUPPIES

LUCKY DOGS

Each, Illustrated, 3s. 6d. net.

SO YOU LIKE DOGS !

Illustrated. 2s. 6d. net.

THE ROWLAND JOHNS DOG BOOK

Illustrated. 5s. net.

'OUR FRIEND THE DOG' SERIES

Edited by ROWLAND JOHNS.

THE CAIRN

THE COCKER SPANIEL

THE FOX-TERRIER

THE PEKINGESE

THE AIREDALE

THE ALSATIAN

THE SCOTTISH TERRIER

THE CHOW-CHOW

THE IRISH SETTER

THE DALMATIAN

THE LABRADOR

THE SEALYHAM

THE DACHSHUND Each 2s. 6d. net.



**KIPLING (Rudyard)**

BARRACK-ROOM BALLADS

THE SEVEN SEAS

THE FIVE NATIONS

DEPARTMENTAL DIITTIES

THE YEARS BETWEEN

Four Editions of these famous volumes of poems are now published, viz. :—

*Buckram, 7s. 6d. net.*

*Cloth, 6s. net. Leather, 7s. 6d. net.*

Service Edition. Two volumes each book. *3s. net each vol.*

A KIPLING ANTHOLOGY—VERSE

*Leather, 7s. 6d. net.*

*Cloth, 6s. net and 3s. 6d. net.*

TWENTY POEMS FROM RUDYARD

KIPLING *1s. net.*

A CHOICE OF SONGS *2s. net.*SELECTED POEMS *1s. net.***LAMB (Charles and Mary)**

THE COMPLETE WORKS

Edited by E. V. LUCAS. Six volumes. *6s. net each.*

SELECTED LETTERS

Edited by G. T. CLAPTON.

*3s. 6d. net.*

THE CHARLES LAMB DAY-BOOK

Compiled by E. V. LUCAS. *6s. net.*

**LANKESTER (Sir Ray)**

SCIENCE FROM AN EASY CHAIR

First Series

SCIENCE FROM AN EASY CHAIR

Second Series

DIVERSIONS OF A NATURALIST

GREAT AND SMALL THINGS

*Each, Illustrated, 7s. 6d. net.*

SECRETS OF EARTH AND SEA

*Illustrated. 8s. 6d. net.*

**LINDRUM (Walter)**

BILLIARDS. Illustrated. *2s. 6d. net.*

**LODGE (Sir Oliver)**

MAN AND THE UNIVERSE

*7s. 6d. net and 3s. 6d. net.*

THE SURVIVAL OF MAN *7s. 6d. net.*RAYMOND *10s. 6d. net.*RAYMOND REVISED *6s. net.*MODERN PROBLEMS *3s. 6d. net.*REASON AND BELIEF *3s. 6d. net.*THE SUBSTANCE OF FAITH *2s. net.*RELATIVITY *1s. net.*CONVICTION OF SURVIVAL *2s. net.***LUCAS (E. V.), C.H.**

READING, WRITING AND REMEM-  
BERING *18s. net.*

THE LIFE OF CHARLES LAMB

2 Vols. *£1 1s. net.*

THE COLVINS AND THEIR FRIENDS

*£1 1s. net.*

VERMEER THE MAGICAL *5s. net.*

A WANDERER IN ROME

A WANDERER IN HOLLAND

A WANDERER IN LONDON

LONDON REVISITED (Revised)

A WANDERER IN PARIS

A WANDERER IN FLORENCE

A WANDERER IN VENICE

*Each 10s. 6d. net.*

A WANDERER AMONG PICTURES

*8s. 6d. net.*

E. V. LUCAS'S LONDON *£1 net.*THE OPEN ROAD *6s. net.*

Also, illustrated by CLAUDE A.

SHEPPERSON, A.R.W.S.

*10s. 6d. net.*

Also, India Paper.

*Leather, 7s. 6d. net.*

THE JOY OF LIFE *6s. net.*

*Leather Edition, 7s. 6d. net.*

Also, India Paper.

*Leather, 7s. 6d. net.*

THE GENTLEST ART

THE SECOND POST

FIRESIDE AND SUNSHINE

CHARACTER AND COMEDY

GOOD COMPANY

ONE DAY AND ANOTHER

OLD LAMPS FOR NEW

LOITERER'S HARVEST

LUCK OF THE YEAR

EVENTS AND EMBROIDERIES

A FRONDED ISLE

A ROVER I WOULD BE

GIVING AND RECEIVING

HER INFINITE VARIETY

ENCOUNTERS AND DIVERSIONS

TURNING THINGS OVER

TRAVELLER'S LUCK

AT THE SIGN OF THE DOVE

VISIBILITY GOOD

*Each 3s. 6d. net.*

LEMON VERBENA

SAUNTERER'S REWARDS

*Each 6s. net.*

FRENCH LEAVES

ENGLISH LEAVES

THE BARBER'S CLOCK

*Each 5s. net.*

**LUCAS (E. V.)—continued**

- 'THE MORE I SEE OF MEN . . .'  
 OUT OF A CLEAR SKY  
 IF DOGS COULD WRITE  
 ' . . . AND SUCH SMALL DEER '  
*Each 3s. 6d. net.*

*See also Lamb (Charles).*

**LYND (Robert)**

- THE COCKLESHELL 5s. net.  
 RAIN, RAIN, GO TO SPAIN  
 IT'S A FINE WORLD  
 THE GREEN MAN  
 THE PLEASURES OF IGNORANCE  
 THE GOLDFISH  
 THE LITTLE ANGEL  
 THE BLUE LION  
 THE PEAL OF BELLS  
 THE ORANGE TREE  
 THE MONEY-BOX *Each 3s. 6d. net.*  
 'YY.' An Anthology of essays by  
 ROBERT LYND. Edited by EILEEN  
 SQUIRE. 7s. 6d. net.

**MCDUGALL (William)**

- AN INTRODUCTION TO SOCIAL  
 PSYCHOLOGY 10s. 6d. net.  
 NATIONAL WELFARE AND NATIONAL  
 DECAY 6s. net.  
 AN OUTLINE OF PSYCHOLOGY  
 10s. 6d. net.  
 AN OUTLINE OF ABNORMAL PSYCHO-  
 LOGY 15s. net.  
 BODY AND MIND 12s. 6d. net.  
 CHARACTER AND THE CONDUCT OF  
 LIFE 10s. 6d. net.  
 MODERN MATERIALISM AND EMER-  
 GENT EVOLUTION 7s. 6d. net.  
 ETHICS AND SOME MODERN WORLD  
 PROBLEMS 7s. 6d. net.  
 THE ENERGIES OF MEN  
 8s. 6d. net.

**MAETERLINCK (Maurice)**

- THE BLUE BIRD 6s. net.  
 Also, illustrated by F. CAYLEY  
 ROBINSON. 10s. 6d. net.  
 OUR ETERNITY 6s. net.  
 THE UNKNOWN GUEST 6s. net.  
 POEMS 5s. net.  
 THE WRACK OF THE STORM 6s. net.  
 THE BETROTHAL 6s. net.  
 MARY MAGDALENE 2s. net.

**MARLOWE (Christopher)**

- THE WORKS. In 6 volumes.  
 General Editor, R. H. CASE.  
 THE LIFE OF MARLOWE and DIDO,  
 QUEEN OF CARTHAGE 8s. 6d. net.  
 TAMBURLAINE, I AND II 10s. 6d. net.

**MARLOWE (Christopher)—cont.**

- THE JEW OF MALTA and THE  
 MASSACRE AT PARIS 10s. 6d. net.  
 POEMS 10s. 6d. net.  
 DOCTOR FAUSTUS 8s. 6d. net.  
 EDWARD II 8s. 6d. net.

**MASEFIELD (John)**

- ON THE SPANISH MAIN 8s. 6d. net.  
 A SAILOR'S GARLAND 3s. 6d. net.  
 SEA LIFE IN NELSON'S TIME  
 7s. 6d. net.

**METHUEN (Sir A.)**

- AN ANTHOLOGY OF MODERN VERSE  
 SHAKESPEARE TO HARDY: An  
 Anthology of English Lyrics.  
*Each, Cloth, 6s. net.*  
*Leather, 7s. 6d. net.*

**MILNE (A. A.)**

- TOAD OF TOAD HALL  
 A Play founded on Kenneth  
 Grahame's 'The Wind in the  
 Willows'. 5s. net.  
 THOSE WERE THE DAYS: Collected  
 Stories 7s. 6d. net.  
 BY WAY OF INTRODUCTION  
 NOT THAT IT MATTERS  
 IF I MAY  
 THE SUNNY SIDE  
 THE RED HOUSE MYSTERY  
 ONCE A WEEK  
 THE HOLIDAY ROUND  
 THE DAY'S PLAY  
 MR. PIM PASSES BY  
*Each 3s. 6d. net.*

- WHEN WE WERE VERY YOUNG  
 WINNIE-THE-POOH  
 NOW WE ARE SIX  
 THE HOUSE AT POOH CORNER  
 Each illustrated by E. H. SHEPARD.  
 7s. 6d. net. *Leather, 10s. 6d. net.*  
 THE CHRISTOPHER ROBIN VERSES  
 ('When We were Very Young'  
 and 'Now We are Six' com-  
 plete in one volume). Illustrated  
 in colour and line by E. H.  
 SHEPARD. 8s. 6d. net.  
 THE CHRISTOPHER ROBIN STORY  
 BOOK  
 Illustrated by E. H. SHEPARD.  
 5s. net.

**THE CHRISTOPHER ROBIN BIRTH-  
DAY BOOK**

- Illustrated by E. H. SHEPARD.  
 3s. 6d. net.  
 FOURTEEN SONGS FROM 'WHEN WE  
 WERE VERY YOUNG' 7s. 6d. net.

**MILNE (A. A.) and FRASER-SIMSON (H.)—continued**

TEDDY BEAR AND OTHER SONGS  
FROM 'WHEN WE WERE VERY  
YOUNG' 7s. 6d. net.

THE KING'S BREAKFAST 3s. 6d. net.  
SONGS FROM 'NOW WE ARE SIX'  
7s. 6d. net.

MORE 'VERY YOUNG' SONGS  
7s. 6d. net.

THE HUMS OF POOH 7s. 6d. net.  
In each case the words are by  
A. A. MILNE, the music by H.  
FRASER-SIMSON, and the decorations  
by E. H. SHEPARD.

**MORTON (H. V.)**

A LONDON YEAR  
Illustrated, 6s. net.

THE HEART OF LONDON  
3s. 6d. net.  
Also, with Scissor Cuts by L.  
HUMMEL. 6s. net.

THE SPELL OF LONDON  
THE NIGHTS OF LONDON  
BLUE DAYS AT SEA  
Each 3s. 6d. net.

IN SEARCH OF ENGLAND  
THE CALL OF ENGLAND  
IN SEARCH OF SCOTLAND  
IN SCOTLAND AGAIN  
IN SEARCH OF IRELAND  
IN SEARCH OF WALES

Each, illustrated, 7s. 6d. net.

**OMAN (Sir Charles)**

THINGS I HAVE SEEN 8s. 6d. net.  
A HISTORY OF THE ART OF WAR IN  
THE MIDDLE AGES, A.D. 378-1485.  
2 vols. Illustrated. £1 16s. net.  
STUDIES IN THE NAPOLEONIC WARS  
8s. 6d. net.

**PERRY (W. J.)**

THE ORIGIN OF MAGIC AND  
RELIGION  
THE GROWTH OF CIVILIZATION  
Each 6s. net.  
THE CHILDREN OF THE SUN  
£1 1s. net.

**PETRIE (Sir Flinders)**

A HISTORY OF EGYPT  
In 6 Volumes.  
Vol. I. FROM THE 1ST TO THE  
XVTH DYNASTY 12s. net.  
Vol. II. THE XVIIITH AND XVIIIITH  
DYNASTIES 9s. net.  
Vol. III. XIXTH TO XXXTH  
DYNASTIES 12s. net.  
Vol. IV. EGYPT UNDER THE  
PTOLEMAIC DYNASTY  
By EDWYN BEVAN. 15s. net.

**PETRIE (Sir Flinders)—continued**

VOL. V. EGYPT UNDER ROMAN RULE  
By J. G. MILNE. 12s. net.

VOL. VI. EGYPT IN THE MIDDLE  
AGES  
By S. LANE POOLE. 10s. net.

**PONSONBY OF SHULBREDE (Lord)**

ENGLISH DIARIES £1 1s. net.  
MORE ENGLISH DIARIES  
12s. 6d. net.  
SCOTTISH AND IRISH DIARIES  
10s. 6d. net.

**RAGLAN (Lord)**

JOCASTA'S CRIME 6s. net.  
THE SCIENCE OF PEACE 3s. 6d. net.

**SELLAR (W. C.) and YEATMAN (R. J.)**

1066 AND ALL THAT  
Illustrated by JOHN REYNOLDS.  
5s. net.

AND NOW ALL THIS  
Illustrated by JOHN REYNOLDS.  
5s. net.

HORSE NONSENSE  
Illustrated by JOHN REYNOLDS  
5s. net.

**STEVENSON (R. L.)**

THE LETTERS Edited by Sir SIDNEY  
COLVIN. 4 Vols. Each 6s. net.

**SURTEES (R. S.)**

HANDLEY CROSS  
MR. SPONGE'S SPORTING TOUR  
ASK MAMMA  
MR. FACEY ROMFORD'S HOUNDS  
PLAIN OR RINGLETS?  
HILLINGDON HALL  
Each, illustrated, 7s. 6d. net.  
JORROCKS'S JAUNTS AND JOLLITIES  
HAWBUCK GRANGE  
Each, illustrated, 6s. net.

**TAYLOR (A. E.)**

PLATO: THE MAN AND HIS WORK  
£1 1s. net.  
PLATO: TIMÆUS AND CRITIAS  
6s. net.  
ELEMENTS OF METAPHYSICS  
12s. 6d. net.

**TILDEN (William T.)**

THE ART OF LAWN TENNIS  
Revised Edition.  
SINGLES AND DOUBLES  
Each, illustrated, 6s. net.  
THE COMMON SENSE OF LAWN  
TENNIS  
MATCH PLAY AND THE SPIN OF THE  
BALL  
Each, illustrated, 5s. net.

**TILESTON (Mary W.)**

DAILY STRENGTH FOR DAILY NEEDS

3s. 6d. net

India Paper. *Leather*, 6s. net.**UNDERHILL (Evelyn)**MYSTICISM. *Revised Edition.*

15s. net.

THE LIFE OF THE SPIRIT AND THE

LIFE OF TO-DAY 7s. 6d. net.

MAN AND THE SUPERNATURAL

7s. 6d. net.

THE GOLDEN SEQUENCE

Paper boards, 3s. 6d. net;

Cloth, 5s. net.

MIXED PASTURE: Essays and

Addresses 5s. net.

CONCERNING THE INNER LIFE

2s. net.

THE HOUSE OF THE SOUL. 2s. net.

**VARDON (Harry)**

HOW TO PLAY GOLF

Illustrated. 5s. net.

**WILDE (Oscar)**

LORD ARTHUR SAVILE'S CRIME AND

THE PORTRAIT OF MR. W. H.

6s. 6d. net.

THE DUCHESS OF PADUA

3s. 6d. net.

**WILDE (Oscar)—continued**

POEMS

6s. 6d. net.

LADY WINDERMERE'S FAN

6s. 6d. net.

A WOMAN OF NO IMPORTANCE

6s. 6d. net.

AN IDEAL HUSBAND

6s. 6d. net.

THE IMPORTANCE OF BEING EARNEST

6s. 6d. net.

A HOUSE OF POMEGRANATES

6s. 6d. net.

INTENTIONS

6s. 6d. net.

DE PROFUNDIS and PRISON LETTERS

6s. 6d. net.

ESSAYS AND LECTURES

6s. 6d. net.

SALOMÉ, A FLORENTINE TRAGEDY,

and LA SAINTE COURTISANE

2s. 6d. net.

SELECTED PROSE OF OSCAR WILDE

6s. 6d. net.

ART AND DECORATION

6s. 6d. net.

FOR LOVE OF THE KING

5s. net.

VERA, OR THE NIHILISTS

6s. 6d. net.

**WILLIAMSON (G. C.)**

THE BOOK OF FAMILLE ROSE

Richly illustrated. £8 8s. net.

**METHUEN'S COMPANIONS TO MODERN STUDIES**

SPAIN. E. ALLISON PEERS. 12s. 6d. net.

GERMANY. J. BITHELL. 15s. net.

ITALY. E. G. GARDNER. 12s. 6d. net.

**METHUEN'S HISTORY OF MEDIEVAL AND MODERN EUROPE**In 8 Vols. *Each* 16s. net.

I. 476 to 911. By J. H. BAXTER.

II. 911 to 1198. By Z. N. BROOKE.

III. 1198 to 1378. By C. W. PREVITÉ-ORTON.

IV. 1378 to 1494. By W. T. WAUGH.

V. 1494 to 1610. By A. J. GRANT.

VI. 1610 to 1715. By E. R. ADAIR.

VII. 1715 to 1815. By W. F. REDDAWAY.

VIII. 1815 to 1923. By Sir J. A. R. MARRIOTT





**Boston Public Library**  
**Central Library, Copley Square**

**Division of**  
**Reference and Research Services**

The Date Due Card in the pocket indicates the date on or before which this book should be returned to the Library.

Please do not remove cards from this pocket.





